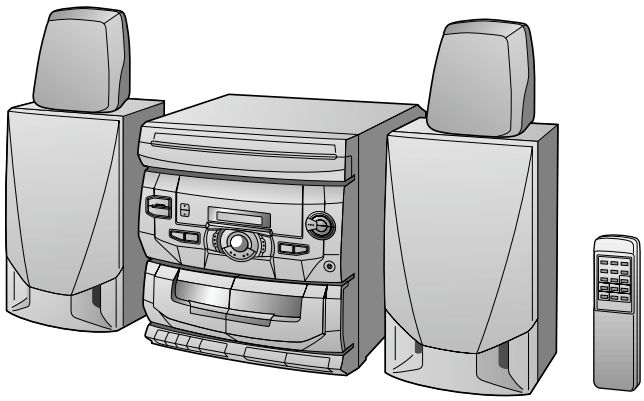
SHARP SERVICE MANUAL

No. S1903CDC602//



COMPACT disc DIGITAL AUDIO

CD-C602
CP-C602

CD-C602 mini component system consisting of CD-C602 mini component system, CP-C602 and rear (GBOXS0020AWM1) speaker system.

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

IMPORTANT SERVICE NOTES (FOR U.S.A. ONLY)

BEFORE RETURNING THE AUDIO PRODUCT

(Fire & Shock Hazard)

Before returning the audio product to the user, perform the following safety checks.

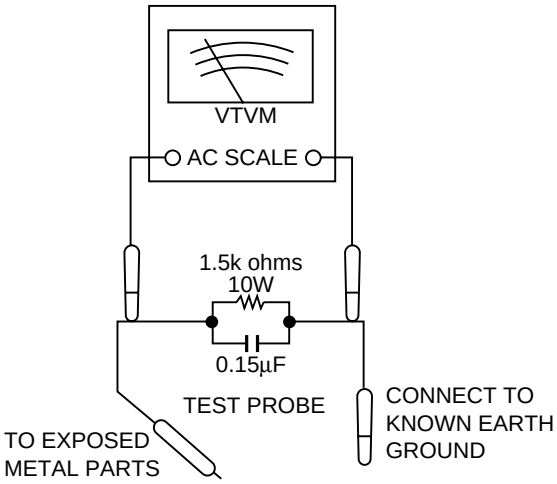
1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the audio product.
2. Inspect all protective devices such as insulating materials, cabinet, terminal board, adjustment and compartment covers or shields, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

* Plug the AC line cord directly into a 120 volt AC outlet.

* Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as conduit or electrical ground connected to earth ground.

* Use a VTVM or VOM with 1000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor (See diagram).

* Connect the resistor connection to all exposed metal parts having a return path to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.



All check must be repeated with the AC line cord plug connection reversed.

Any reading of 0.3 volt RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the audio product to the owner.

SPECIFICATIONS

CD-C602

● General

Power source: AC 120 V, 60 Hz

Power consumption: 25 W

Dimensions: Width; 10-5/8" (270 mm)
Height; 11-1/16" (280 mm)
Depth; 13-1/8" (332.5 mm)

Weight: 9.2 lbs. (4.2 kg)

● Amplifier section

Output terminals: Headphones; 16-50 ohms (recommended; 32 ohms)
Front speaker ; 6 ohms
Rear speaker ; 12 ohms

● Tuner section

Frequency range: FM; 87.5-108 MHz
AM; 530-1,720 kHz

● Cassette deck section

Frequency response: 50-14,000 Hz (Normal tape)

Signal/noise ratio: 50 dB (TAPE 1, recording/playback)
55 dB (TAPE 2, playback)

Wow and flutter: 0.15 % (WRMS)

● Compact disc player section

Type: 3-disc multi-play compact disc player

Signal readout: Non-contact, 3-beam semiconductor laser pickup

D/A converter: 1-bit D/A converter

Frequency response: 20 -20,000 Hz

Dynamic range: 90 dB (1 kHz)

CP-C602

● Front speaker section

Type: 4" (10 cm) full-range speaker

Maximum input power: 5 W

Impedance: 6 ohms

Dimensions: Width; 6-11/16" (170 mm)
Height; 11-1/16" (280 mm)
Depth; 5-15/16" (151 mm)

Weight: 3.1 lbs. (1.4 kg)/each

GBOXS0020AWM1

● Rear speaker section

Type: 3-3/32" (8 cm) full-range speaker

Maximum input power: 4 W

Impedance: 12 ohms

Dimensions: Width; 6" (150 mm)
Height; 6" (150 mm)
Depth; 3" (78 mm)

Weight: 0.9 lbs. (0.4 kg)/each

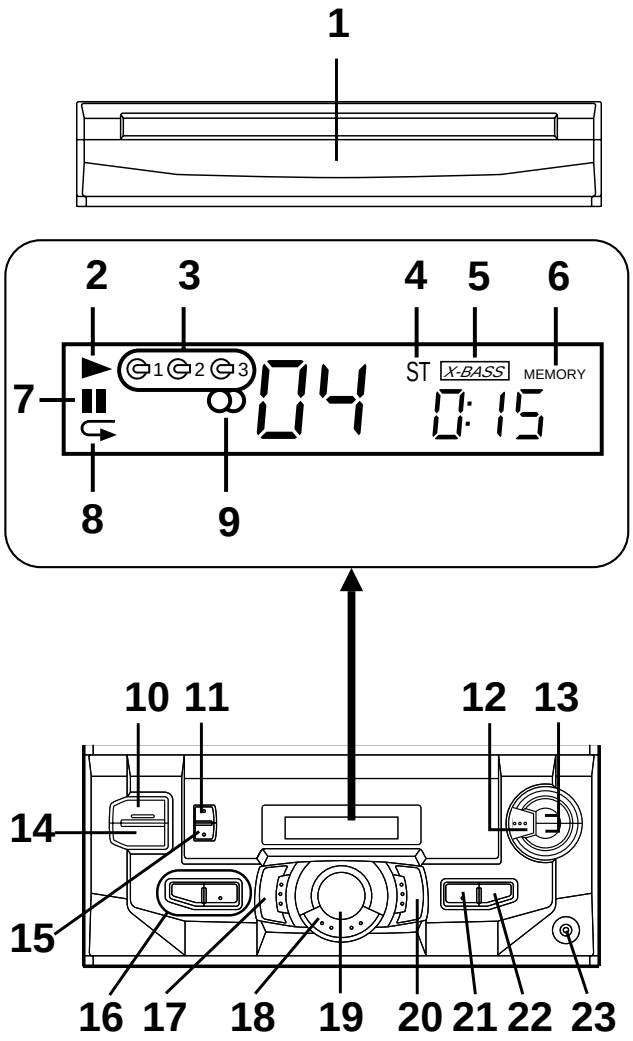
Specifications for this model are subject to change without prior notice.

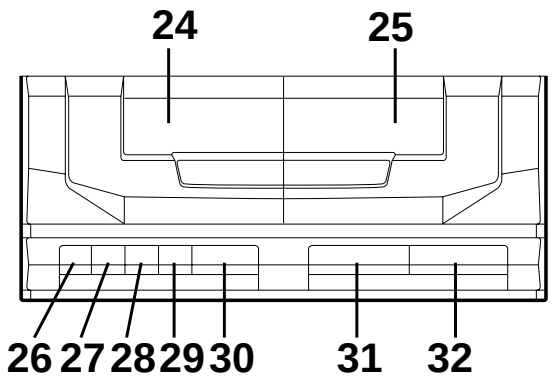
NAMES OF PARTS

CD-C602

■ Front panel

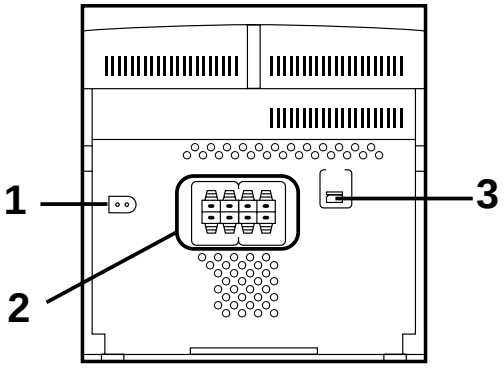
1. Disc Tray
2. CD Play Indicator: ▶
3. Disc Number Indicators
4. FM Stereo Mode Indicator: ST
5. Extra Bass Indicator: X-BASS
6. Memory Indicator
7. CD Pause Indicator: ❚❚
8. CD Repeat Indicator:
9. FM Stereo Indicator:
10. Power Button
11. Memory Button
12. Extra Bass Button: X-BASS
13. Volume Up/Down Buttons: /
14. Function Selector Button
15. Band Selector Button
16. Tuning Up/Down Buttons: /
17. (CD) Track Down/Review Button: ◀◀ /|◀◀
    (TUNER) Preset Down Button:
18. Stop Button: ■
19. Play/Repeat Button: ▶ /
20. (CD) Track Up/Cue Button: ▶▶ /▶▶|
    (TUNER) Preset Up Button:
21. Disc Skip Button
22. Open/Close Button: ▲
23. Headphone Socket
24. (TAPE 1) Cassette Compartment
25. (TAPE 2) Cassette Compartment
26. (TAPE 1) Record Button: ●
27. (TAPE 1) Play Button: ▶
28. (TAPE 1) Rewind Button: ◀◀
29. (TAPE 1) Fast Forward Button: ▶▶
30. (TAPE 1) Stop/Eject Button: ■ /▲
31. (TAPE 2) Play Button: ▶
32. (TAPE 2) Stop/Eject Button: ■ /▲





■ Rear panel

1. AC Power Input Socket
2. Speaker Terminals
3. FM/AM Loop Aerial Socket



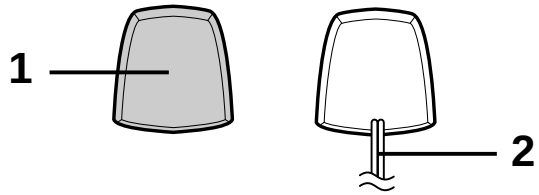
CD-C602,CP-C602

■ Speaker section

GBOXS0020AWM1

● **Rear speaker**

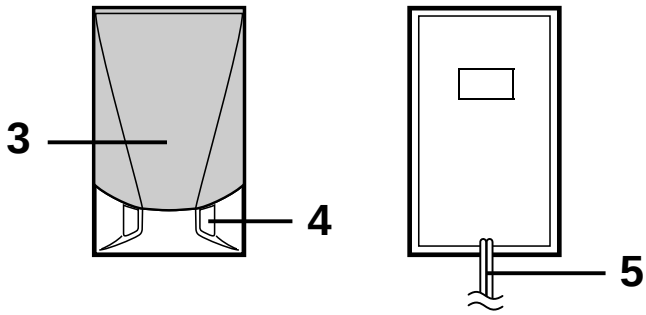
1. **Woofer**
2. **Speaker Wire**



CP-C602

● **Front speaker**

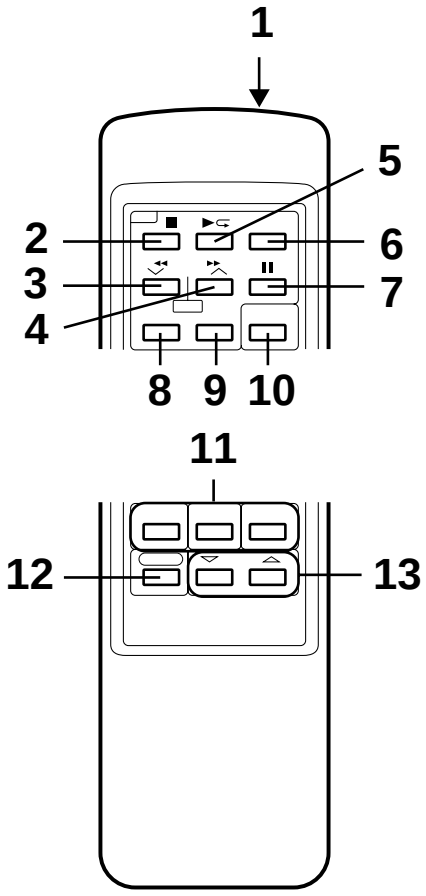
3. **Woofer**
4. **Bass Reflex Duct**
5. **Speaker Wire**



CD-C602

■ Remote control

1. **Remote Control Transmitter LED**
2. **Stop Button: ■**
3. **(CD) Track Down/Review Button: ◀◀ / |◀◀**
   (TUNER) Preset Down Button: ﹀
4. **(CD) Track Up/Cue Button: ▶▶ / ▶▶|**
   (TUNER) Preset Up Button: ﹀
5. **Play/Repeat Button: ▶ ⊆**
6. **Disc Skip Button**
7. **Pause Button: ▲**
8. **Memory Button**
9. **Clear Button**
10. **Extra Bass Button: X-BASS**
11. **Function Selector Buttons**
12. **Power Button**
13. **Volume Up/Down Buttons: ﹀ / ﹀**



RESETTING THE MICROCOMPUTER

Reset the microcomputer by performing the following procedure for the cases shown below:

- To erase all of the stored memory contents, or
- If the display does not function properly, or
- The unit does not operate properly.

1 Press the POWER button to turn the power off.

2 Press and hold down the POWER button and the ■ button at the same time. Hold them down for at least 1 second.

3 Press the POWER button to turn the power on.

Caution:

- The operation explained above will erase all data stored in memory including the tuner and CD presets.

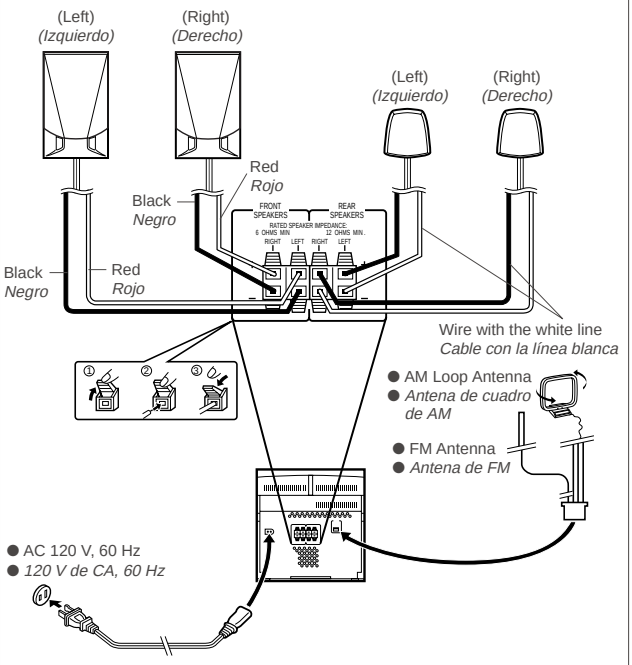
QUICK GUIDE

SHARP

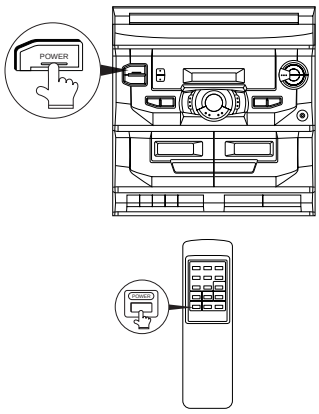
MINI COMPONENT SYSTEM CD-C602

Quick-Guide
Guía rápida

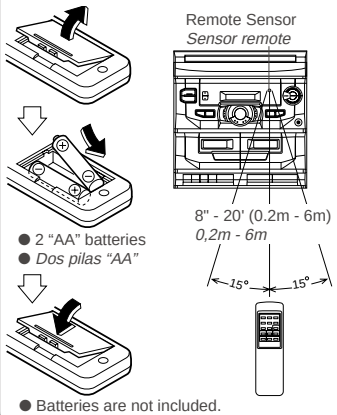
Preparation for use
Preparación para su uso



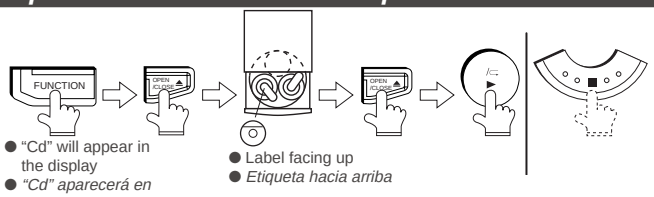
Turning the power on and off
Conexión y desconexión de la alimentación



Remote control
Control remoto

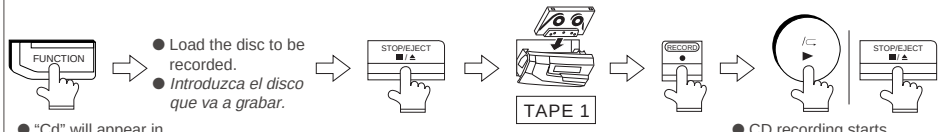


CD playback
Reproducción de discos compactos



- "Cd" will appear in the display
- *"Cd" aparecerá en el visualizador*
- Label facing up
- *Etiqueta hacia arriba*

Recording from CDs
Grabación de discos compactos



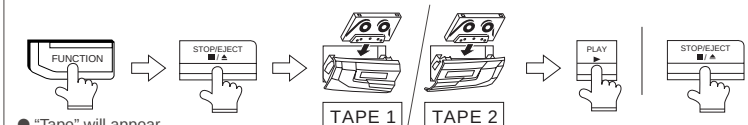
- Load the disc to be recorded.
- *Introduzca el disco que va a grabar.*
- "Cd" will appear in the display
- *"Cd" aparecerá en el visualizador*
- CD recording starts.
- *La grabación de CD empieza.*

Precaution
Precaucíon

- The sound level at a given volume setting depends on a combination of speaker efficiency, location and many other factors. It is advisable to avoid exposure to high volume levels, which occur while turning the unit on with the volume control setting up high, or while continually listening at high volume levels.
- *El nivel de sonido en una posición de volumen fijado depende de una combinación del rendimiento de las altavoces, la posición y muchos otros factores. Es aconsejable evitar un aumento de volumen. Esto se produce, por ejemplo, al conectar el aparato con el volumen puesto en una posición alta. Evite continuar la audición prolongada a altos niveles de sonido.*
- Only discs bearing the logo as shown can be played in this unit.
- *En este aparato sólo pueden reproducirse los discos que tengan el logotipo mostrado.*

COMPACT disc DIGITAL AUDIO

Tape playback
Reproducción de cintas



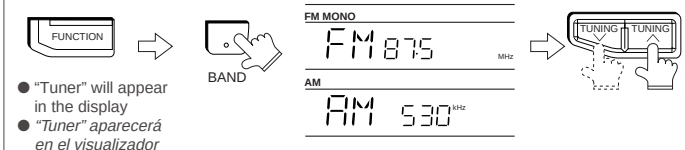
- "Tape" will appear in the display
- *"Tape" aparecerá en el visualizador*

Sound control
Control del sonido

- Volume
- *Volumen*

- Extra-BASS
- *Graves extra*

Radio operation
Funcionamiento de la radio



- "Tuner" will appear in the display
- *"Tuner" aparecerá en el visualizador*

TINSZ0394AWZZ A9812.HK

Printed in Malaysia
Impreso en Malaysia

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

CD-C602

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x4 2. Hook ..... (A2) x3	6-1
2	Side Panel (Left/Right)	1. Screw ..... (B1) x4 2. Screw ..... (B2) x2 3. Hook ..... (B3) x2	6-1
3	CD Tray Cover/ CD Player Unit	1. Turn on the power supply, open the disc tray, take out the CD tray cover, and close. (Note 1) 2. Hook ..... (C1) x3 3. Hook ..... (C2) x2 4. Socket ..... (C3) x4	6-2
4	Back Board	1. Screw ..... (D1) x3	6-2
5	Main PWB/ Display PWB	1. Screw ..... (E1) x10 2. Hook ..... (E2) x2 3. Socket ..... (E3) x6	7-1
6	Front Panel	1. Screw ..... (F1) x2 2. Hook ..... (F2) x5	7-1
7	Tape Mechanism	1. Open the cassette holder. 2. Screw..... (G1) x6	7-2
8	Turntable	1. Screw ..... (H1) x1 2. Stabilizer ..... (H2) x1	7-3
9	Disc Tray	1. Screw ..... (J1) x2 2. Guide ..... (J2) x2	7-3
10	CD Changer Mechanism	1. Screw ..... (K1) x4	7-4
11	CD Mechanism	1. Screw ..... (L1) x1	7-4

Note 1:

How to open the change manually.

1. Then, turn fully the lock lever in the arrow direction through the hole on the loading chassis bottom in this state. After that, push forward the CD player base. (Fig. 6-3)
2. After removing the connector for the optical pickup fromthe connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

CD-C602

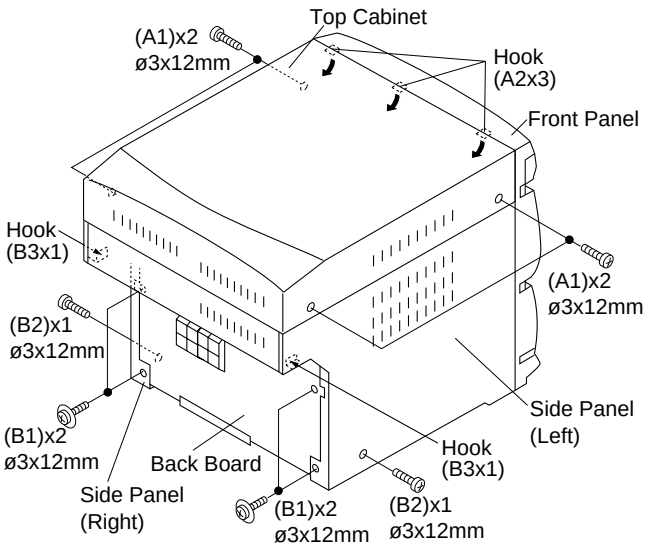


Figure 6-1

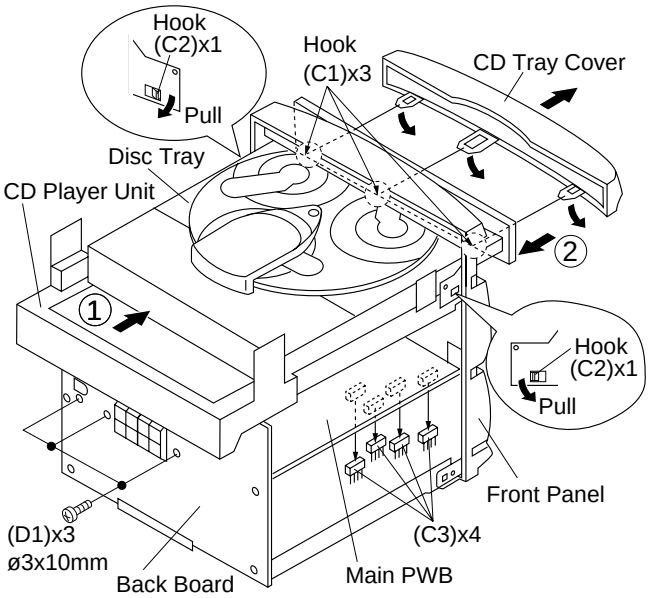


Figure 6-2

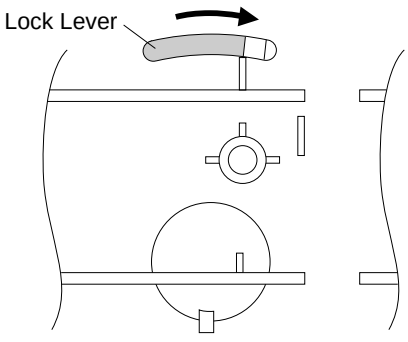


Figure 6-3

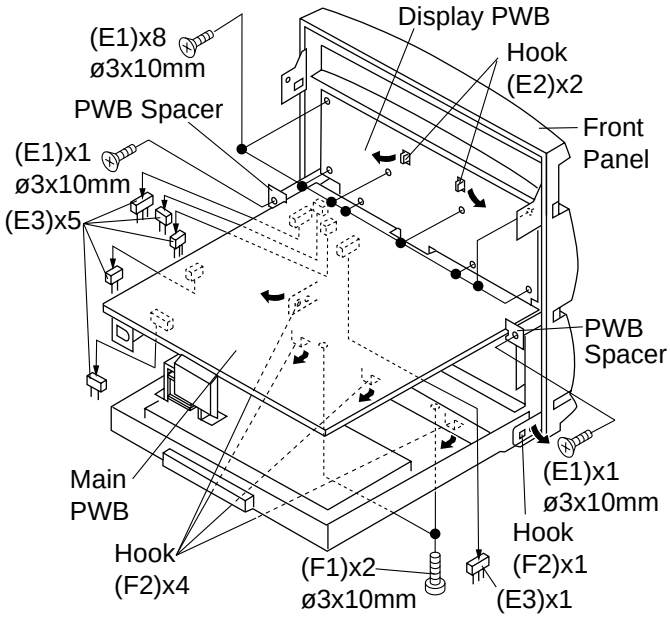


Figure 7-1

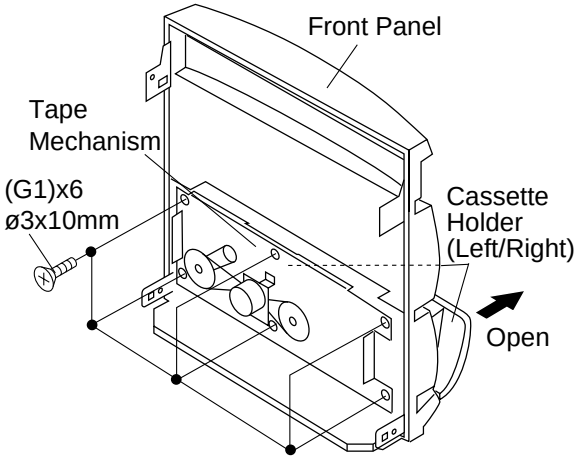


Figure 7-2

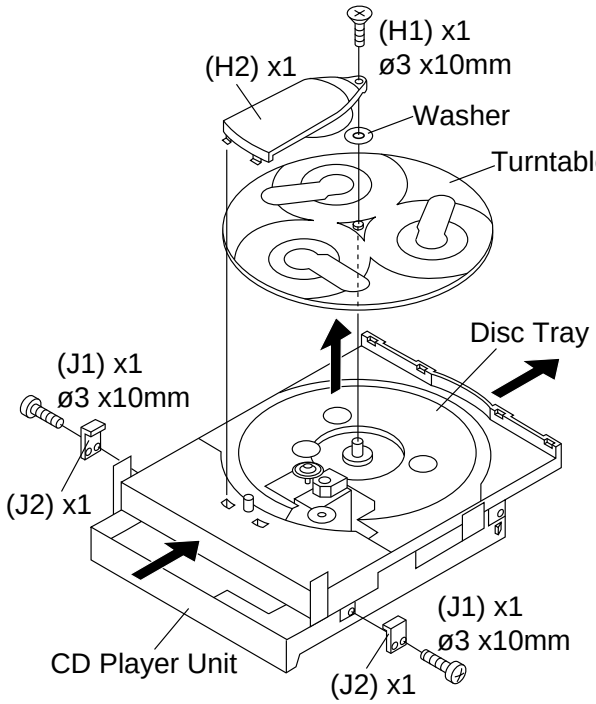
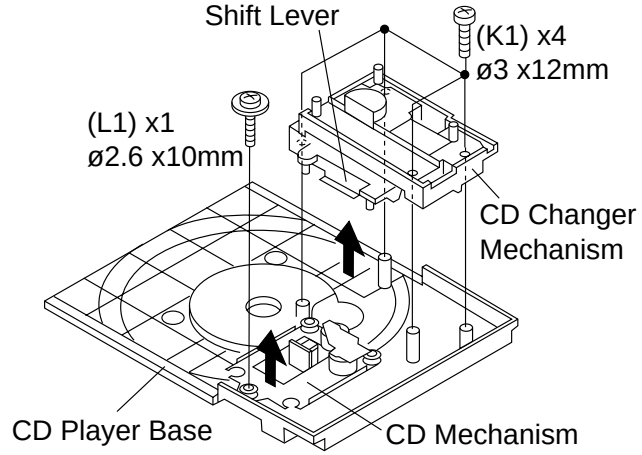


Figure 7-3



Be careful when installing the CD changer mechanism. Install the CD changer mechanism on the CD player base after the shift lever has been set in the highest position.

Figure 7-4

CP-C602

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Speaker	1. Net ..... (A1) x1 2. Duct Panel ..... (A2) x1 3. Screw ..... (A3) x4	7-5 7-6

CP-C602

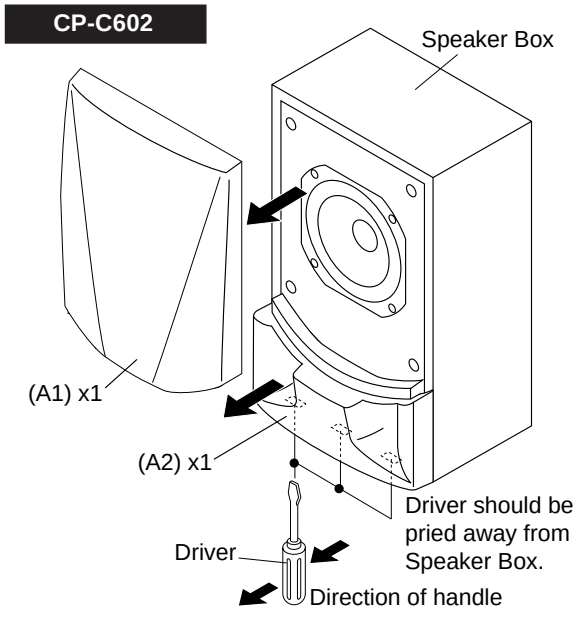


Figure 7-5

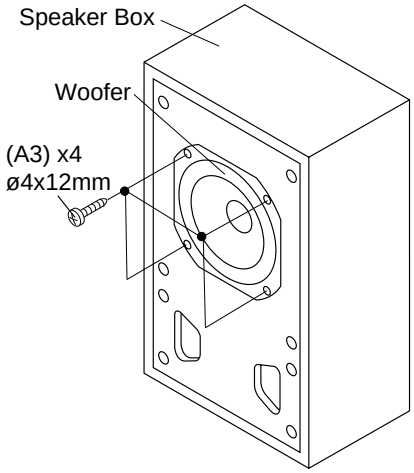


Figure 7-6

REMOVING AND REINSTALLING THE MAIN PARTS

CD MECHANISM SECTION

Perform steps 1, 2, 3, and 8 ~ 11 of the disassembly method to remove the CD mechanism.

How to remove the turntable up/down/loading motor (See Fig. 8-1)

1. Remove the screws (A1) x 2 pcs., to remove the turntable up/down/loading motor.

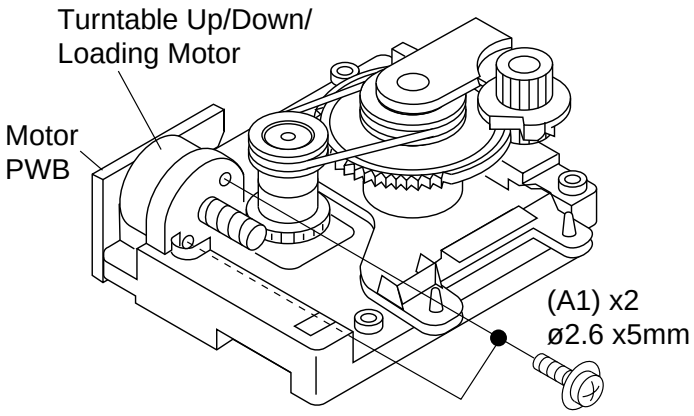


Figure 8-1

How to remove the pickup (See Fig. 8-2)

1. Remove the screws (B1) x 2 pcs., to remove the shaft (B2) x 1 pc.
2. Remove the stop washer (B3) x 1 pc., to remove the gear (B4) x 1 pc.
3. Remove the pickup.

Note:
After disconnecting the optical pickup connector wrap the front end of connector in conductive aluminum foil so as to prevent damage to the optical pickup by static electricity.

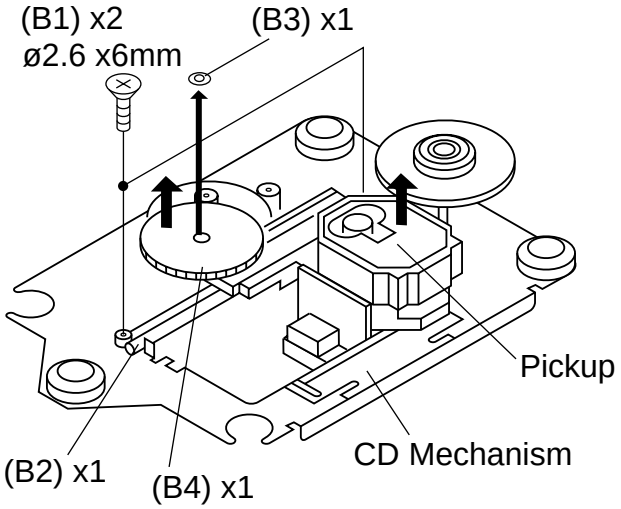


Figure 8-2

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2412	Tape 1: Over 100 g Tape 2: Over 50 g

• Torque Check

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: TW-2111	30 to 60 g. cm	30 to 60 g.cm
Fast forward: TW-2231	80 to 135 g.cm	—
Rewind: TW-2231	80 to 135 g.cm	—

• Tape Speed

	Test Tape	Adjusting Point	Specified Value	Instrument Connection
Normal speed	MTT-111	Volume in motor	3,000 ± 30 Hz	Speaker terminal (Load resistance: 4 ohms)

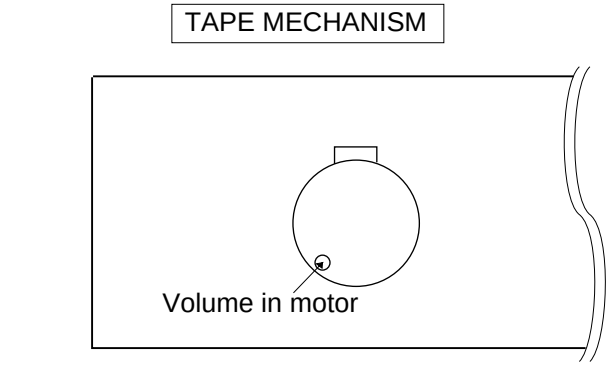


Figure 9-1 ADJUSTMENT POINTS

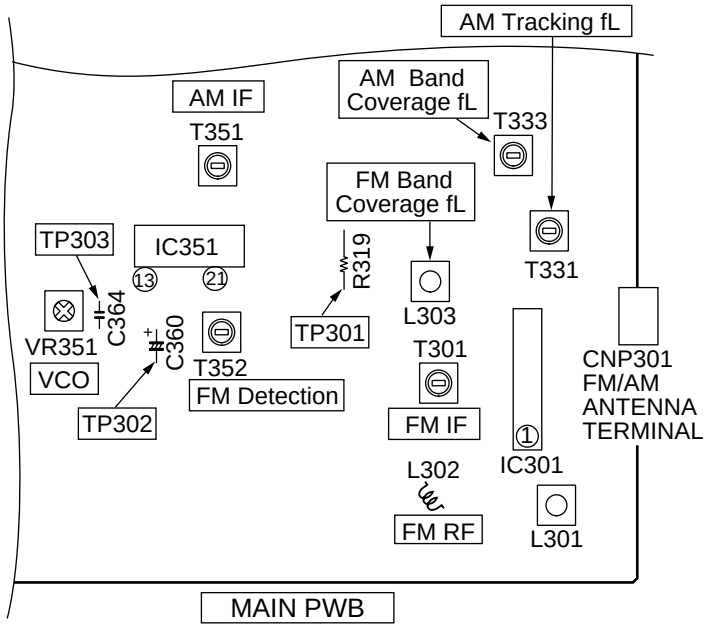


Figure 9-2 ADJUSTMENT POINTS

TUNER SECTION

fL: Low-range frequency
fH: High-renge frequency

• AM IF/RF

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
IF	450 kHz	1,720 kHz	T351	*1
Band Coverage	—	530 kHz	(fL): T333 1.1 ± 0.1 V	*2
Tracking	990 kHz	990 kHz	(fL): T331	*1

*1. Input: Antenna (CNP301), Output: TP302
*2. Input: Antenna (CNP301), Output: TP301

• FM RF

Signal generator: 1 kHz, 22.5 kHz dev., FM modulated

Test Stage	Frequency	Frequency Display	Serring/ Adjusting Point	Instrument Connection
Band Coverage	—	87.50 MHz	L303(fL): 1.3 V ± 0.1 V	*1
RF	98.00 MHz (10-30 dB)	98.00 MHz	L302	*2

*1. Input: Antenna (CNP301), Output: TP301
*2. Input: Antenna (CNP301), Output: Speaker terminal

• FM Detection

Signal generator: 10.7 MHz, FM sweep generator

Test Stage	Frequency	Frequency Display	Adjusting Parts	Instrument Connection
Detection	10.7 MHz	98.00 MHz	T352	Input: Pin 1 of IC301 Output: TP302
IF	10.7 MHz	98.00 MHz	T301(Turn the core of transformer T352 fully counter-clookwise.)	Input: Pin 1 of IC301 Output: TP302

• VCO Frequency

Frequency	Frequency Display	Adjusting Parts	Instrument Connection
98.00 MHz (60 dB)	98.00 MHz	VR351*	Pin 13, Pin 21 and ground of IC351

* Adjust for 76 kHz ± 200 Hz.

Notes:

After preparing the test circuit shown in Fig 9-3, connect the Pin 13 , Pin 21 and ground of the IC351 with test circuit, and measure the Value.

At this time, apply a standard unmodulated signal input and adjust the VCO.

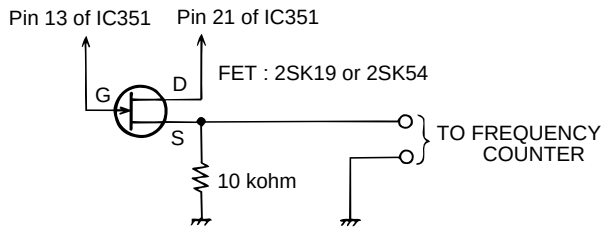


Figure 9-3

CD SECTION

Since this CD system incorporates the following automatic adjustment function, when the pickup is replaced, it is not necessary to readjust it.
Since this CD unit does not need adjustment, the combination of PWB and laser pickup unit is not restricted.

• Automatic adjustment item

1. Focus offset (Fig. 10-1)
2. Tracking offset (Fig. 10-2)
3. E/F balance (tracking error balance) (Fig. 10-3)
4. RF level AGC function (HF level: constant)
5. RF level automatic follow-up of the tracking gain

This automatic adjustment is performed each time a disc is changed.
Therefore, each disc is played back using the optimal settings.

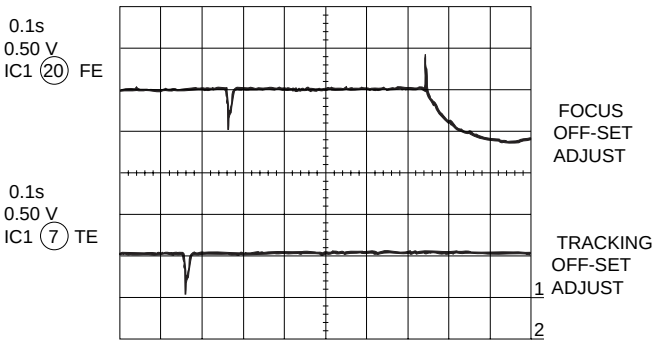


Figure 10-1

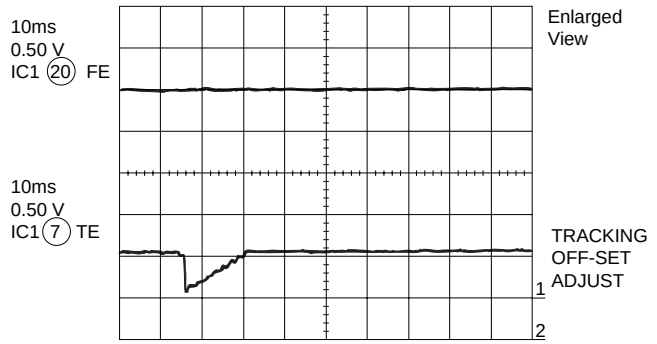


Figure 10-2

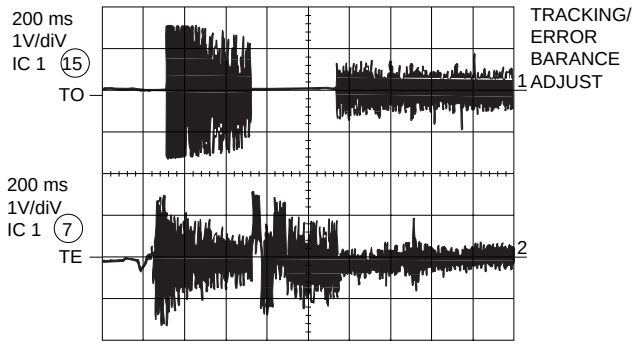


Figure 10-3

CD TEST MODE

When the PLAY ► and POWER buttons are pressed at the same time in OFF MODE, the set will enter CD TEST MODE
↓
"CD TEST" of LCD will light up.
↓
The pickup can be moved by using the (►►) or (◄◄) button.

IL is not performed.

↓ Press PLAY button
LASER ON
↓ Press PLAY button
FOCUS SERVO ON
↓ Press PLAY button
TRACKING ON THE STOP
SERVO OFF PLAY
Display "CD 01 0:00"
↓ Press PLAY button
TRACKING ON THE STOP
SERVO OFF PLAY
↓ Press PLAY button
STOP "CD TEST" will display

Cancel method: POWER OFF

LCD display: After the PLAY or APMS MEMORY button has been pressed, the track No. and time only will appear (valid). The other items are optional.

Note: The pickup can be slid using the ►► or ◄◄ button only while in the stop mode.

ALL CLEAR AND RE-START FUNCTION

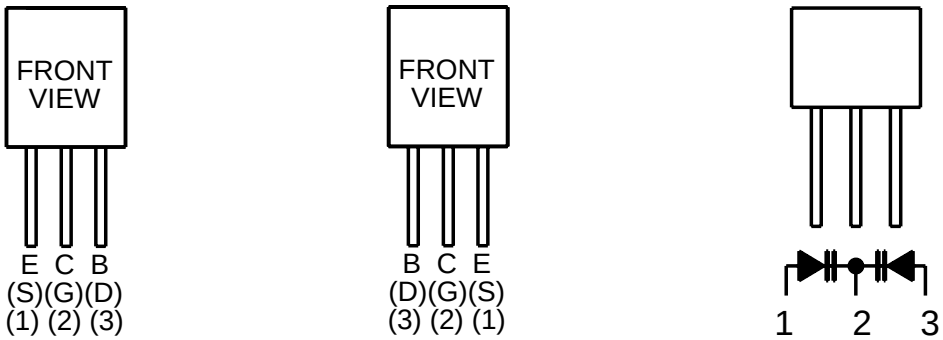
When the STOP and POWER buttons are pressed to turn on the power, the entire internal memory will be cleared and the mechanism will run from address 0.
All of the tuner presets, APMS, TOC and disc numbers which were last stored in memory will be cleared, and the tuner, changer mechanism and all of the other items will be initialized.

NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     ( ) indicates AM
     < > indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
     ( ) indicates the record state.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with “ ⚠ ” (⊏ ═ ═ ═ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW1	OPEN/CLOSE	ON—OFF
SW2	MECHA UP	ON—OFF
SW3	DISC NUMBER	ON—OFF
SW4	PICKUP IN	ON—OFF
SW605	TAPE 1 MAIN	ON—OFF
SW606	TAPE 2 MAIN	ON—OFF
SW607	TAPE 1 RECORD	ON—OFF
SW608	TAPE 1 PLAY	ON—OFF
SW701	POWER	ON—OFF
SW702	VOLUME UP	ON—OFF
SW703	VOLUME DOWN	ON—OFF
SW704	PLAY	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW705	FAST FORWARD	ON—OFF
SW706	REWIND	ON—OFF
SW707	OPEN/CLOSE	ON—OFF
SW708	STOP	ON—OFF
SW709	DISC SKIP	ON—OFF
SW710	X-BASS	ON—OFF
SW711	FUNCTION	ON—OFF
SW712	BAND	ON—OFF
SW714	MEMORY	ON—OFF
SW715	TUNING UP	ON—OFF
SW716	TUNING DOWN	ON—OFF



2SC2389 SE
KRA102 M
KRA109 M
KRC102 M
KRC104 M
KTA1266 GR
KTA1271 Y
KTC3194 Y
KTC3199 GR
KTC3203 Y

2SD2012 Y

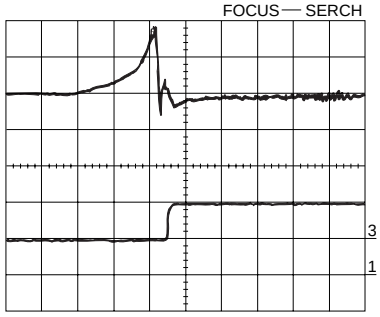
SVC211C
SVC348S

Figure 11 TYPES OF TRANSISTOR

WAVEFORMS OF CD CIRCUIT

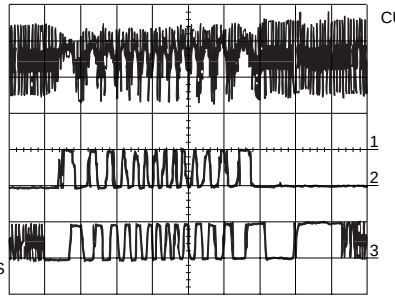
STOP → PLAY
FOCUS — SERCH

1 5ms 0.50 V IC1 (20) FE
2 5ms 5.0 V IC1 (54) DRF



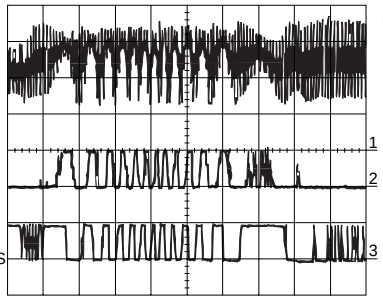
CUE

3 0.5ms 1.00 V IC1 (41) HF
4 0.5ms 5.0 V IC1 (4) HFL
5 0.5ms 5.0 V IC1 (36) TES



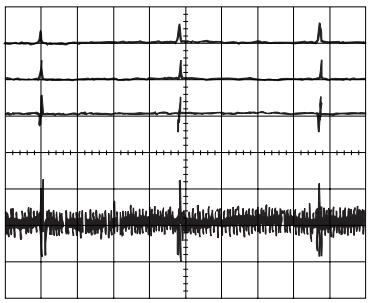
REVIEW

3 0.5ms 1.00 V IC1 (41) HF
4 0.5ms 5.0 V IC1 (4) HFL
5 0.5ms 5.0 V IC1 (36) TES

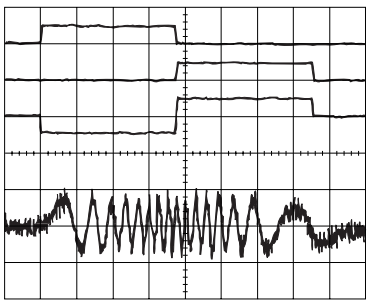


CUE

6 50ms 10.0 V IC1 (33) JP+
7 50ms 10.0 V IC1 (32) JP-
8 50ms 0.50 V IC1 (14) JP
9 50ms 1.00 V IC1 (7) TE

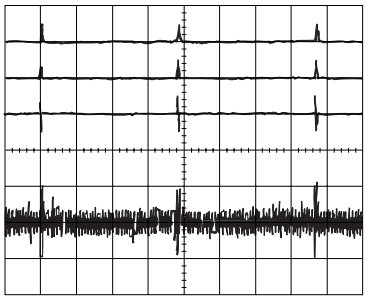


6 0.5ms 10.0 V IC1 (33) JP+
7 0.5ms 10.0 V IC1 (32) JP-
8 0.5ms 0.50 V IC1 (14) JP
9 0.5ms 1.00 V IC1 (7) TE

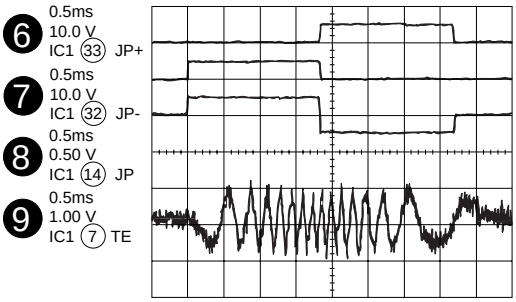


REVIEW

6 50ms 10.0 V IC1 (33) JP+
7 50ms 10.0 V IC1 (32) JP-
8 50ms 0.50 V IC1 (14) JP
9 50ms 1.00 V IC1 (7) TE

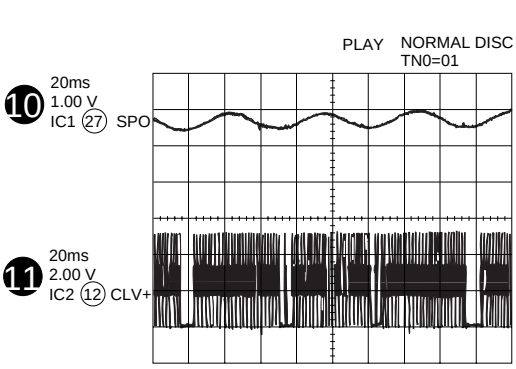


6 0.5ms 10.0 V IC1 (33) JP+
7 0.5ms 10.0 V IC1 (32) JP-
8 0.5ms 0.50 V IC1 (14) JP
9 0.5ms 1.00 V IC1 (7) TE



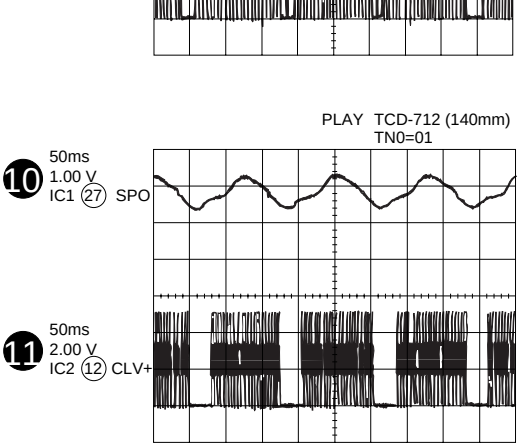
PLAY NORMAL DISC
TN0=01

10 20ms 1.00 V IC1 (27) SPO
11 20ms 2.00 V IC2 (12) CLV+



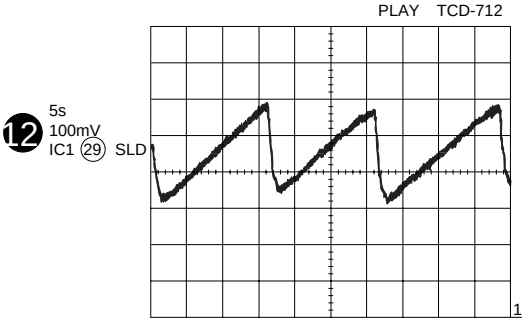
PLAY TCD-712 (140mm)
TN0=01

10 50ms 1.00 V IC1 (27) SPO
11 50ms 2.00 V IC2 (12) CLV+

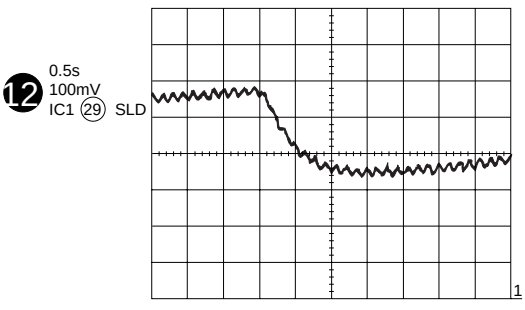


PLAY TCD-712

12 5s 100mV IC1 (29) SLD



12 0.5s 100mV IC1 (29) SLD



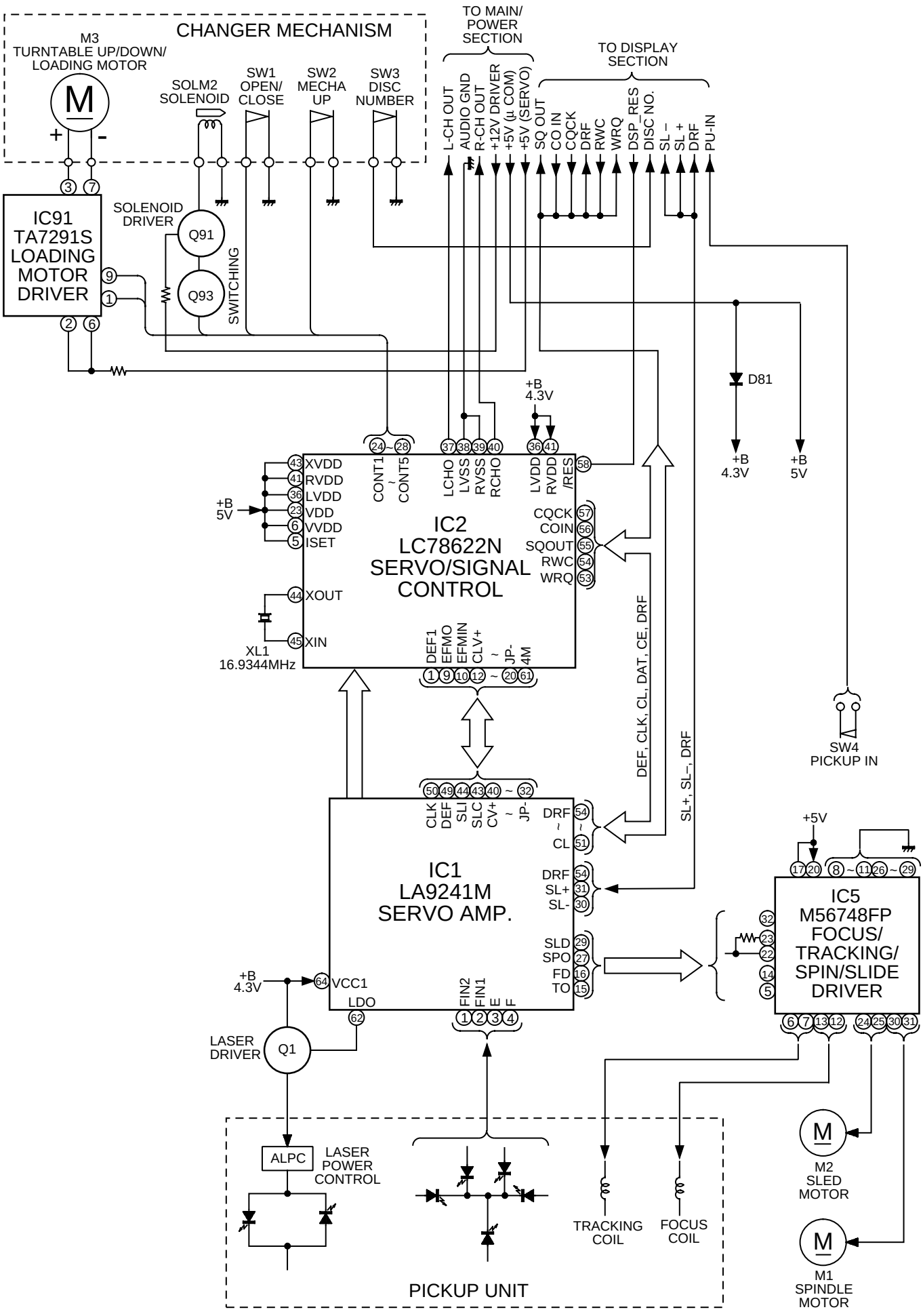


Figure 13 BLOCK DIAGRAM (1/3)

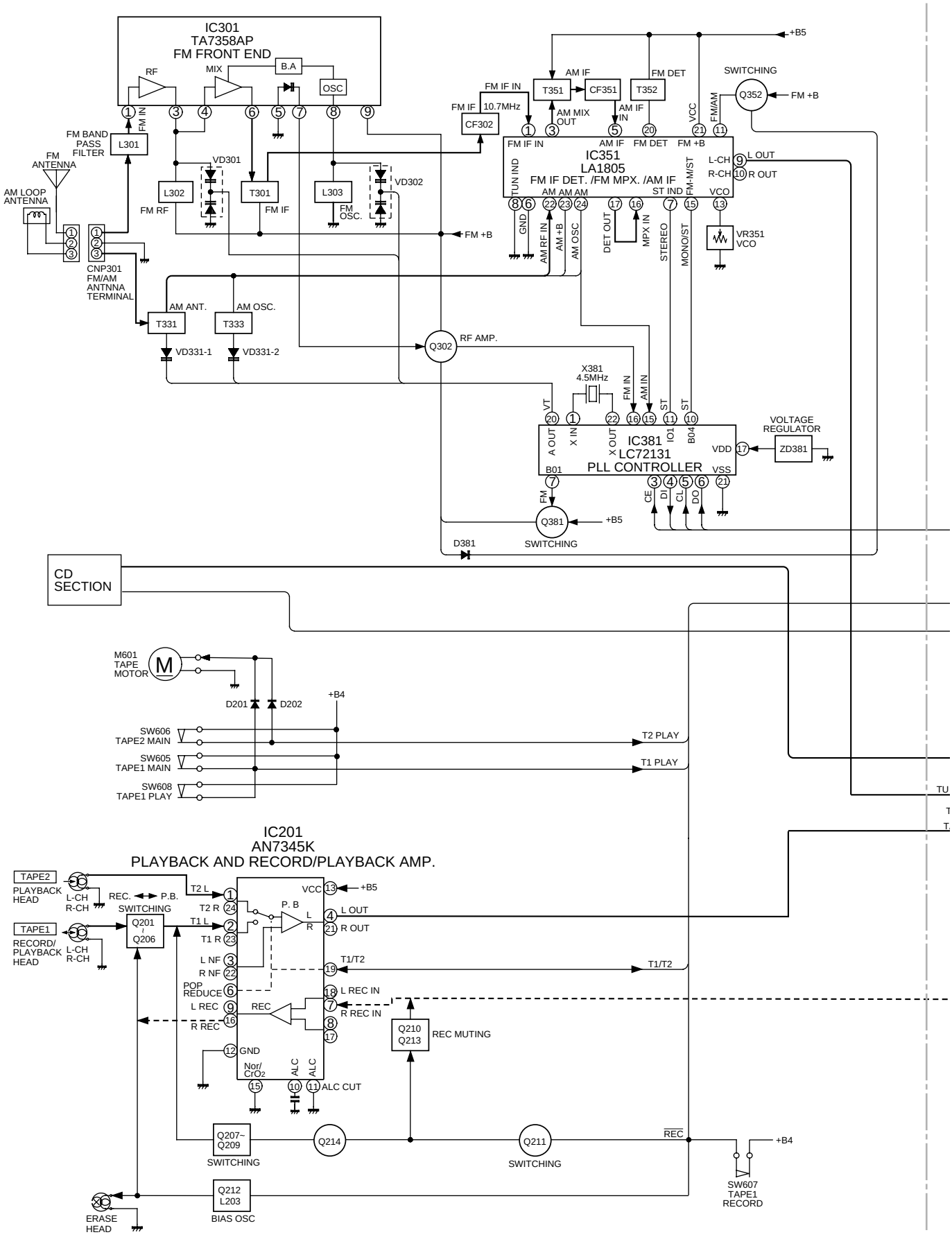


Figure 14 BLOCK DIAGRAM (2/3)

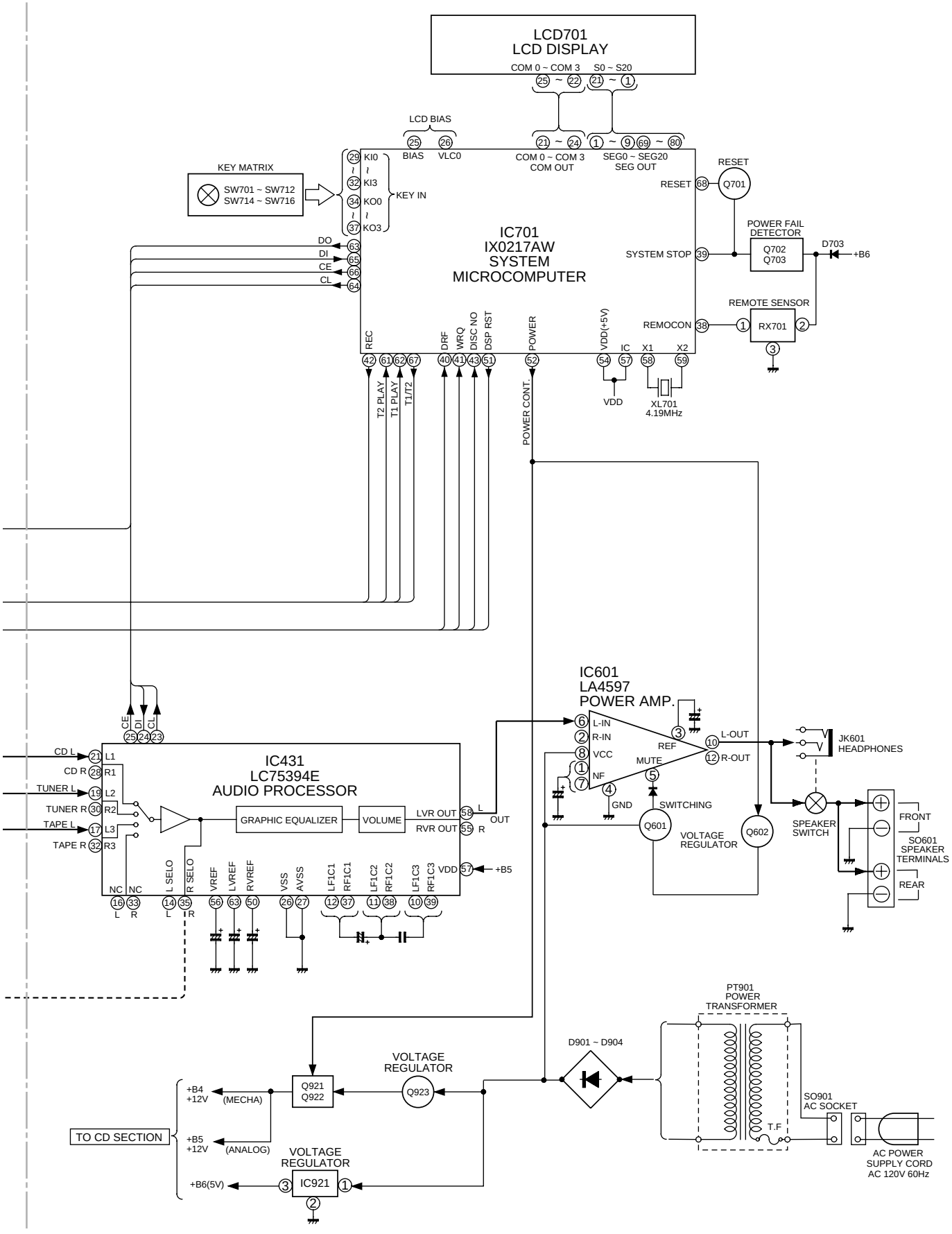
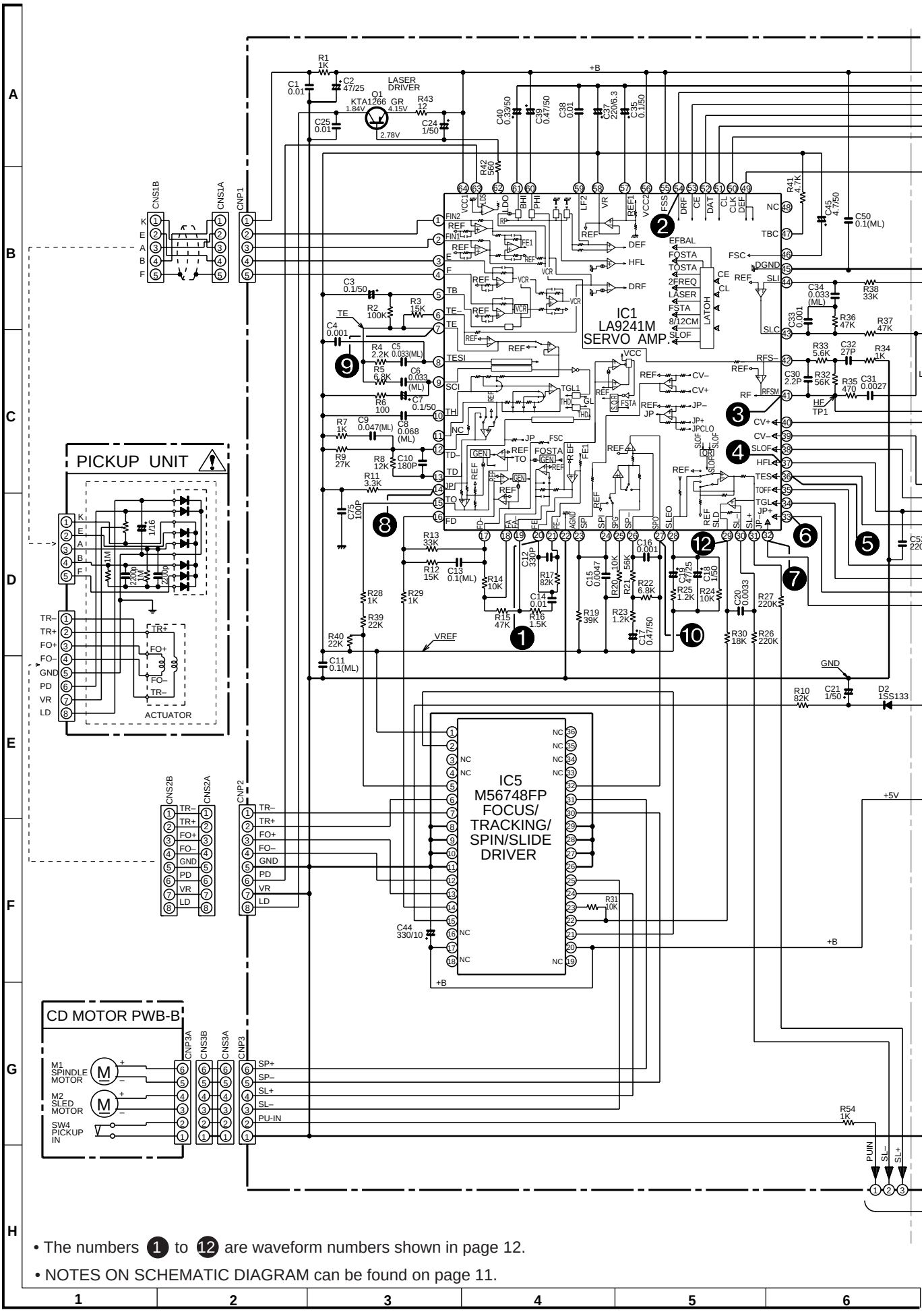


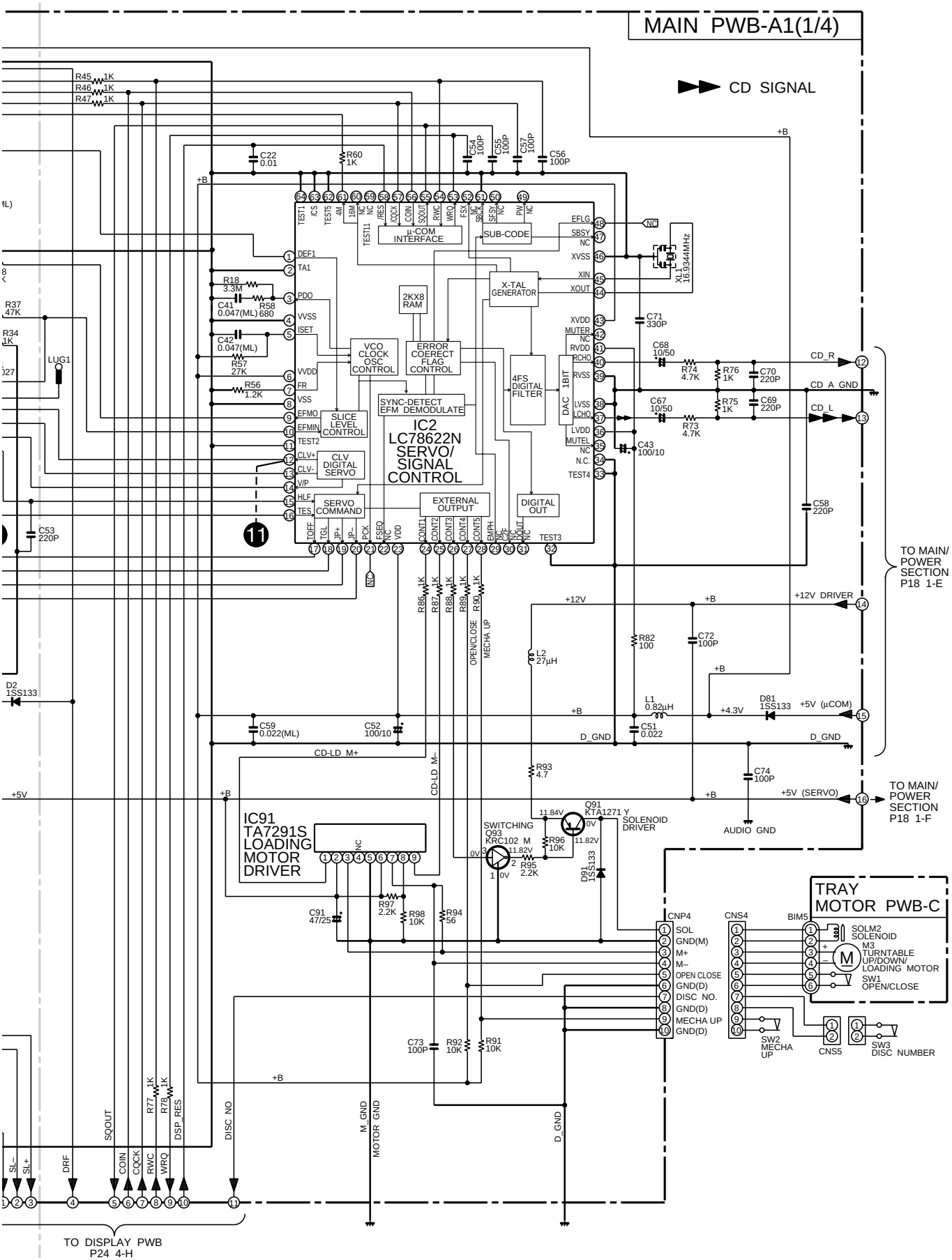
Figure 15 BLOCK DIAGRAM (3/3)



• The numbers 1 to 12 are waveform numbers shown in page 12.

• NOTES ON SCHEMATIC DIAGRAM can be found on page 11.

Figure 16 SCHEMATIC DIAGRAM (1/9)



7	8	9	10	11	12

Figure 17 SCHEMATIC DIAGRAM (2/9)

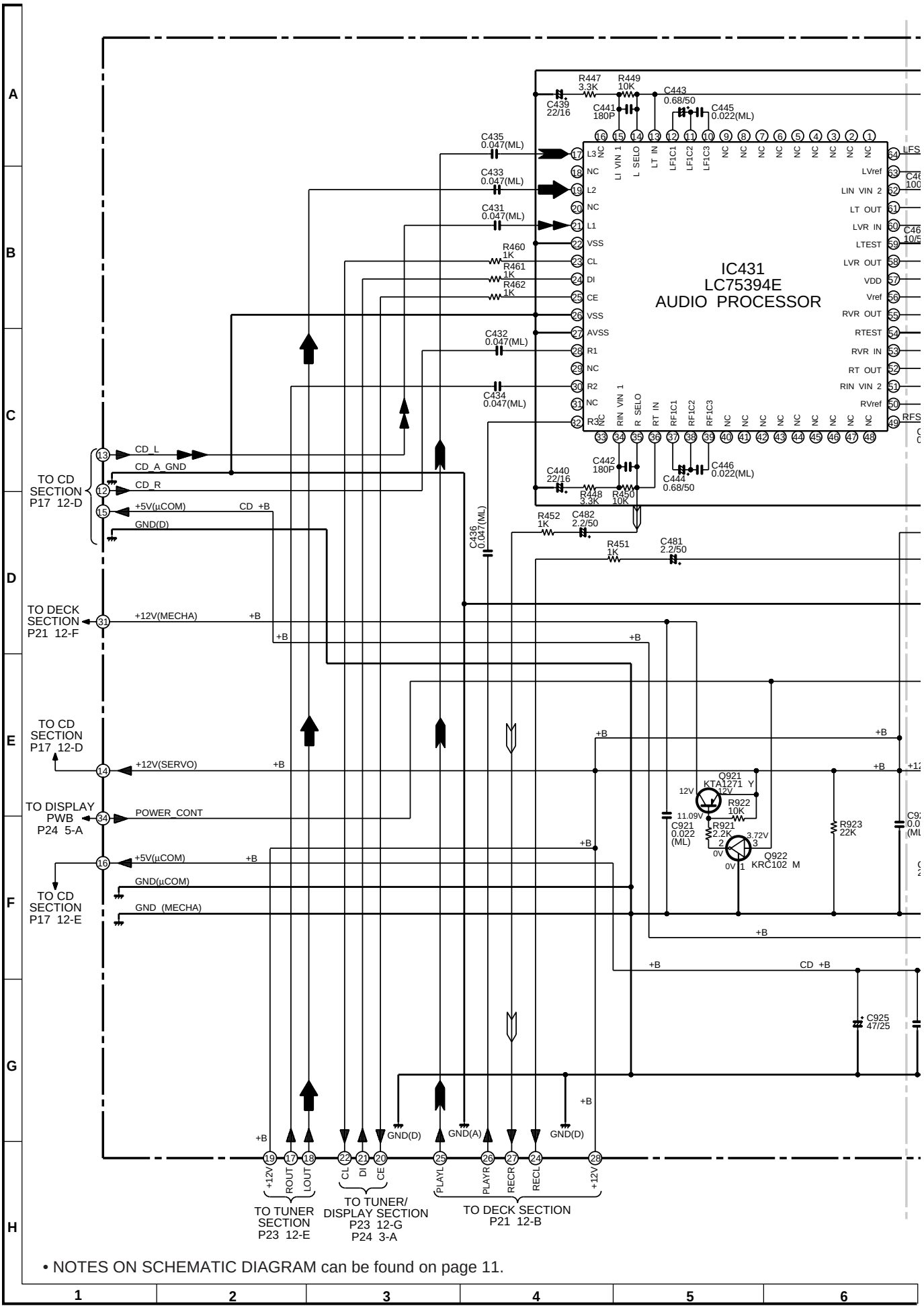
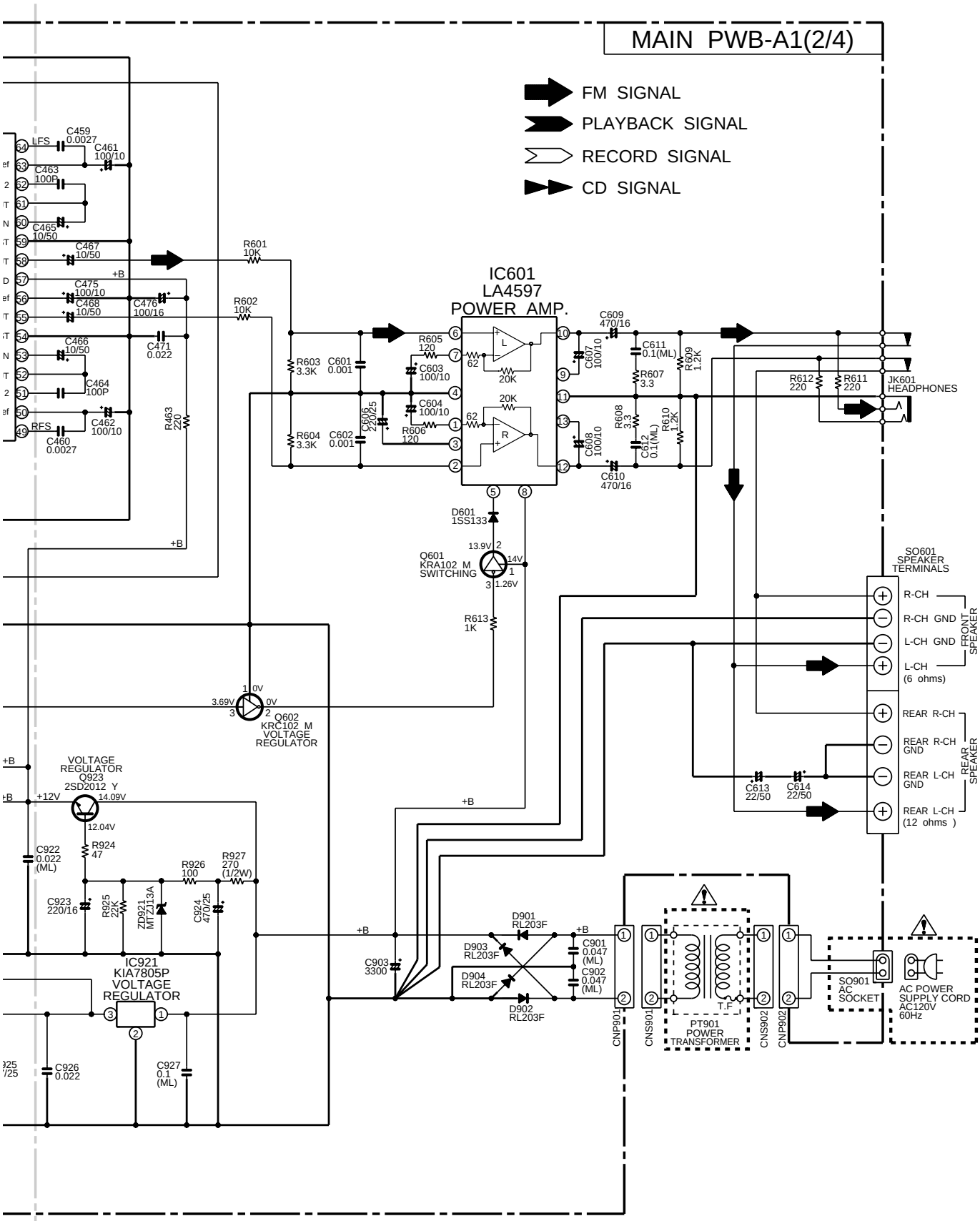
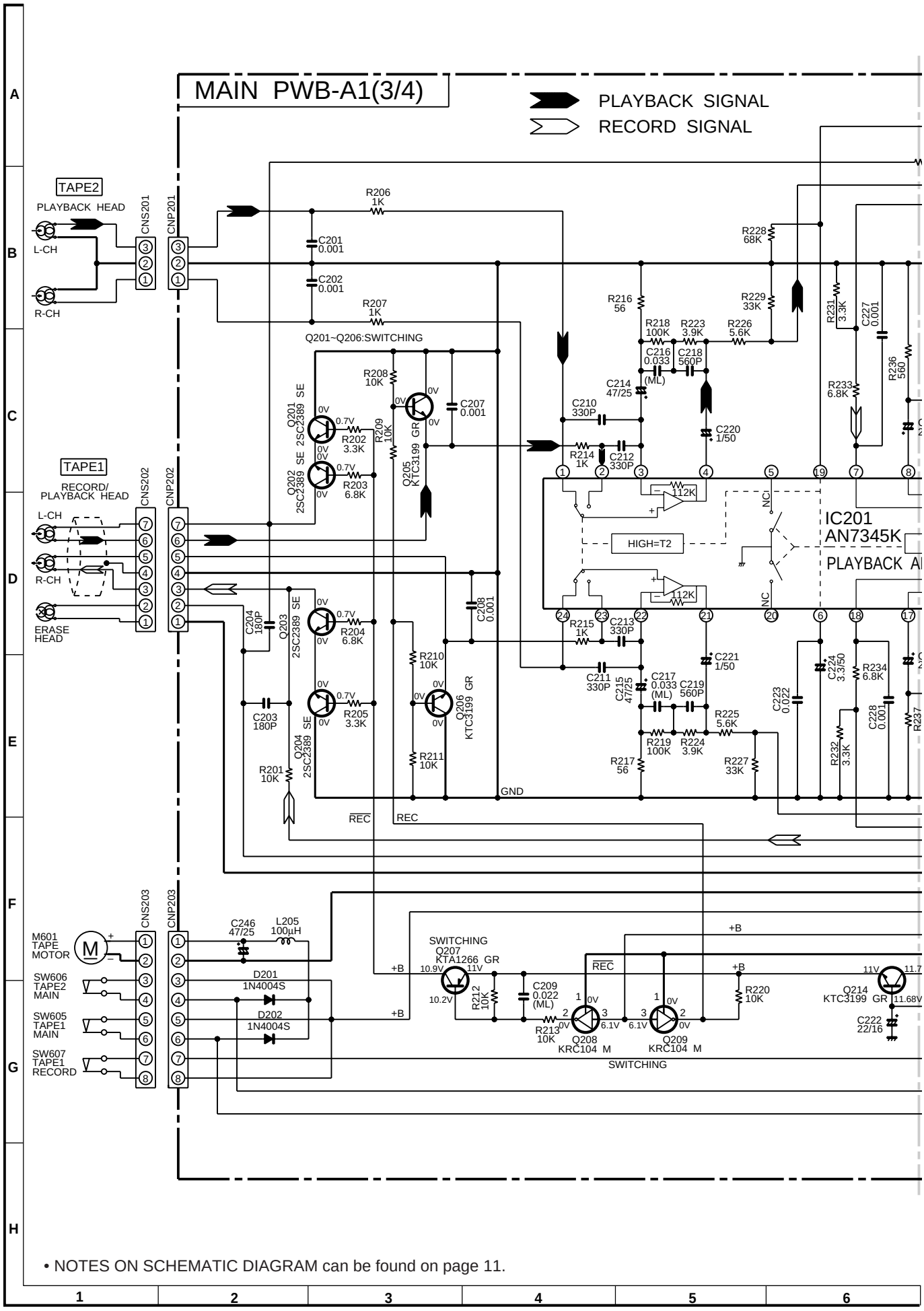


Figure 18 SCHEMATIC DIAGRAM (3/9)



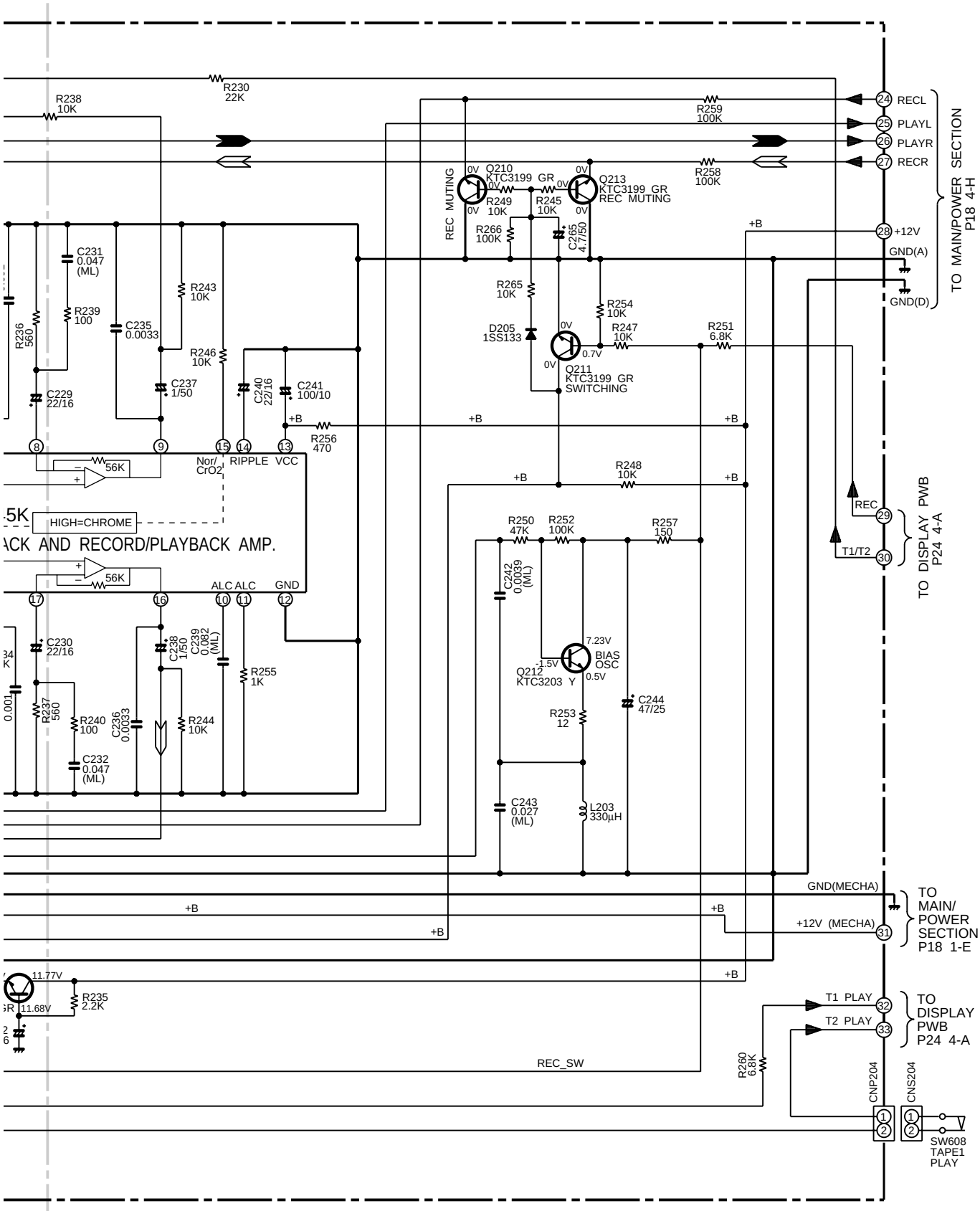
7	8	9	10	11	12

Figure 19 SCHEMATIC DIAGRAM (4/9)



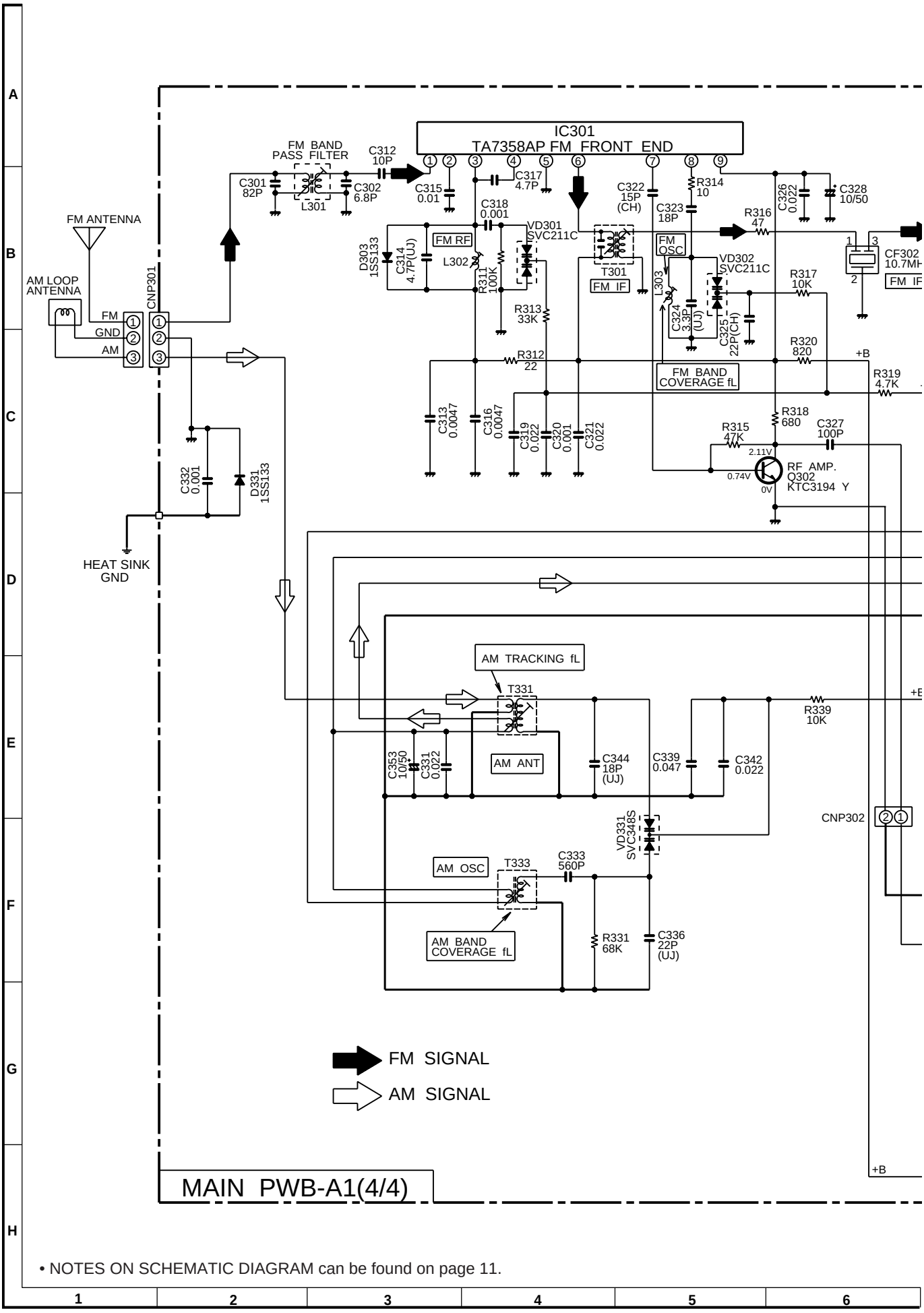
• NOTES ON SCHEMATIC DIAGRAM can be found on page 11.

Figure 20 SCHEMATIC DIAGRAM (5/9)



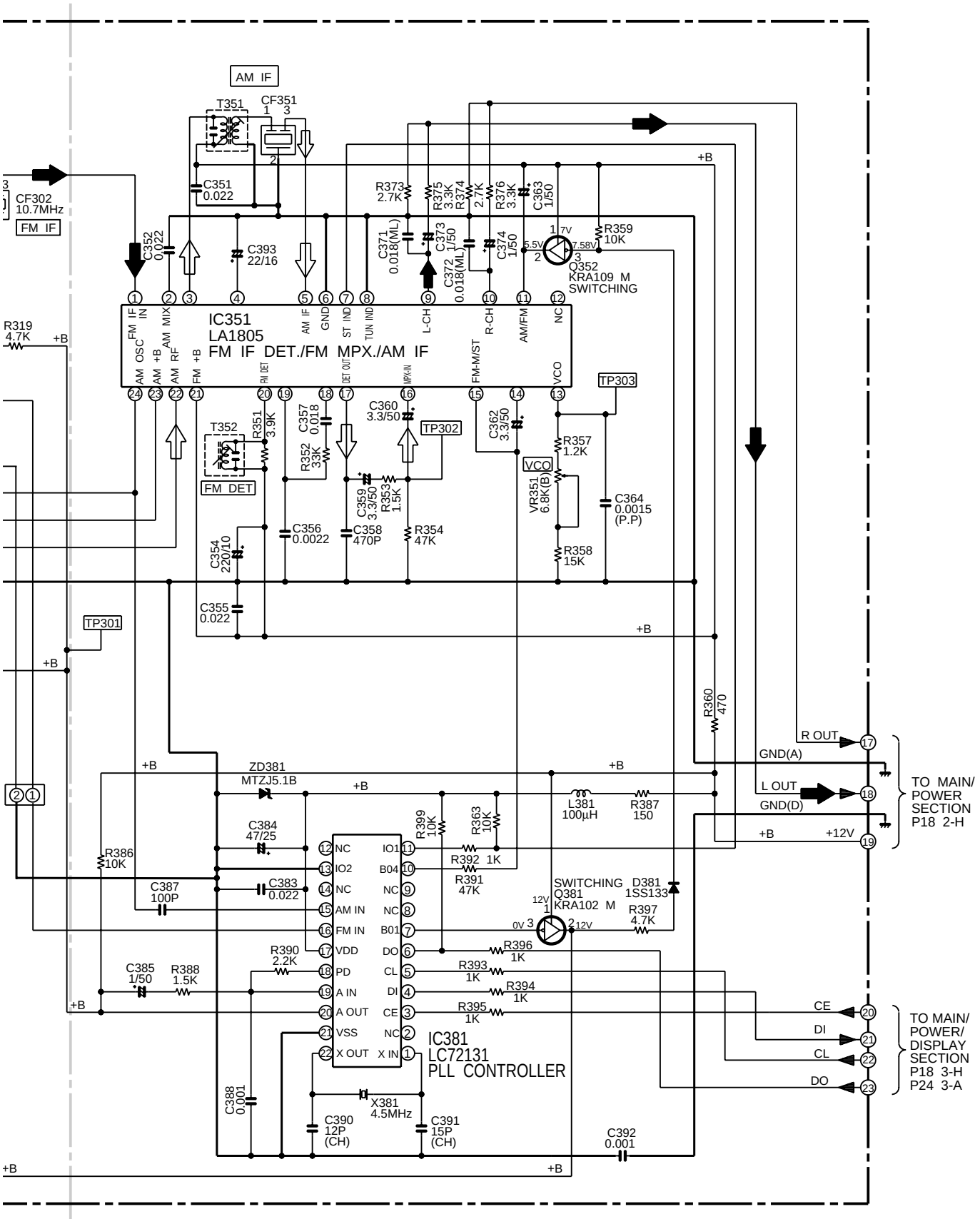
7	8	9	10	11	12

Figure 21 SCHEMATIC DIAGRAM (6/9)



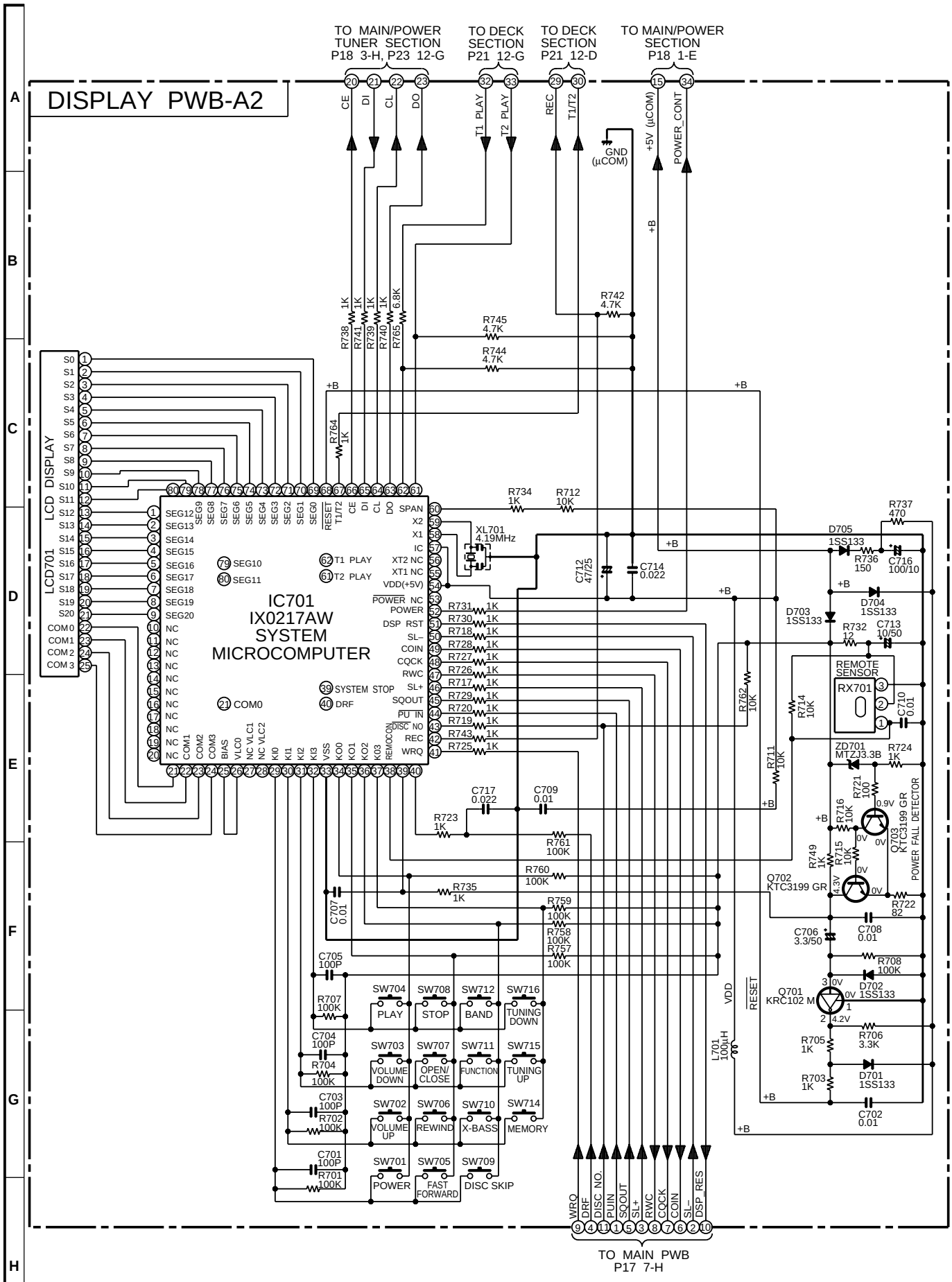
• NOTES ON SCHEMATIC DIAGRAM can be found on page 11.

Figure 22 SCHEMATIC DIAGRAM (7/9)



7	8	9	10	11	12

Figure 23 SCHEMATIC DIAGRAM (8/9)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 11.

Figure 24 SCHEMATIC DIAGRAM (9/9)

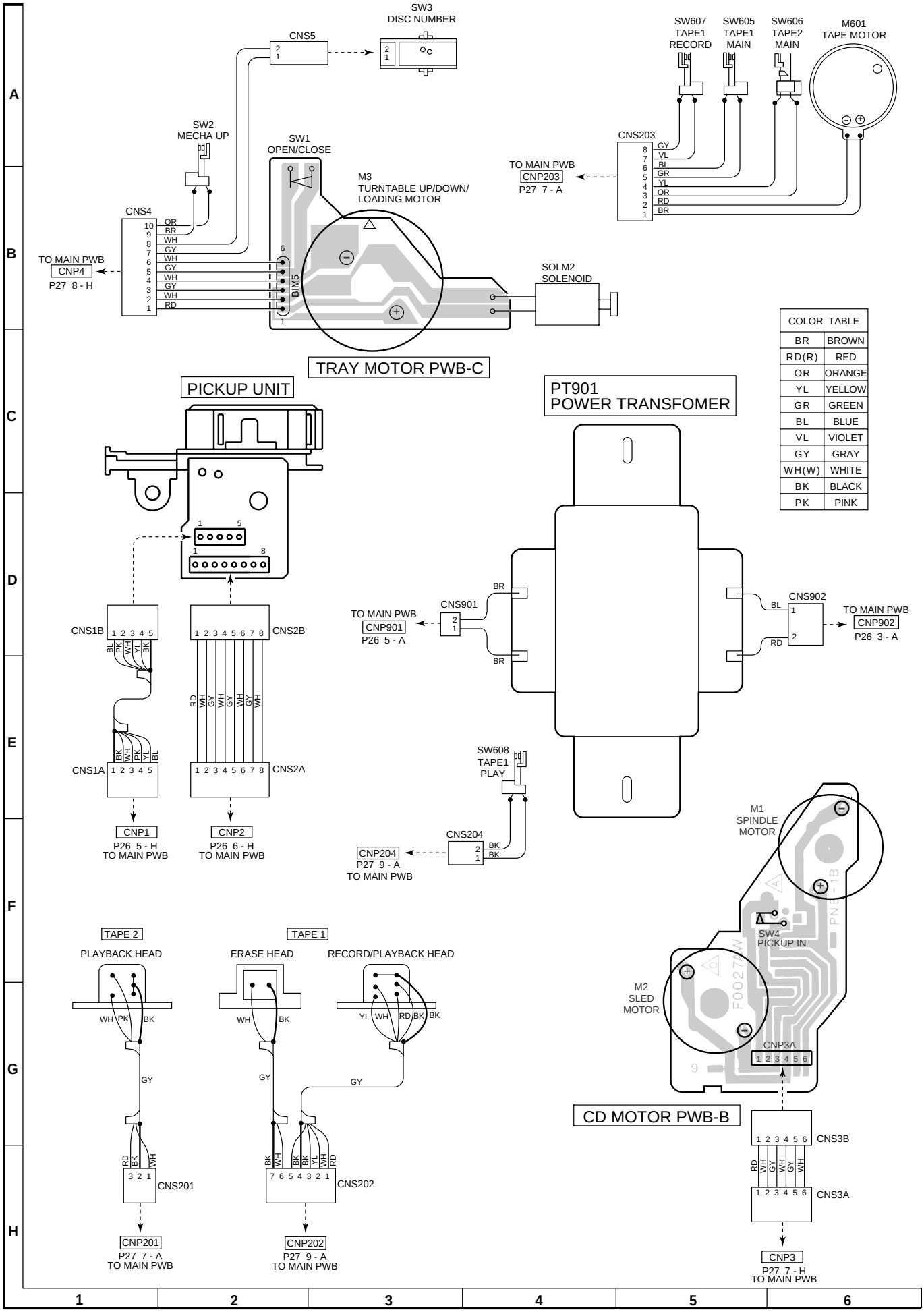


Figure 25 WIRING SIDE OF P.W.BOARD (1/3)

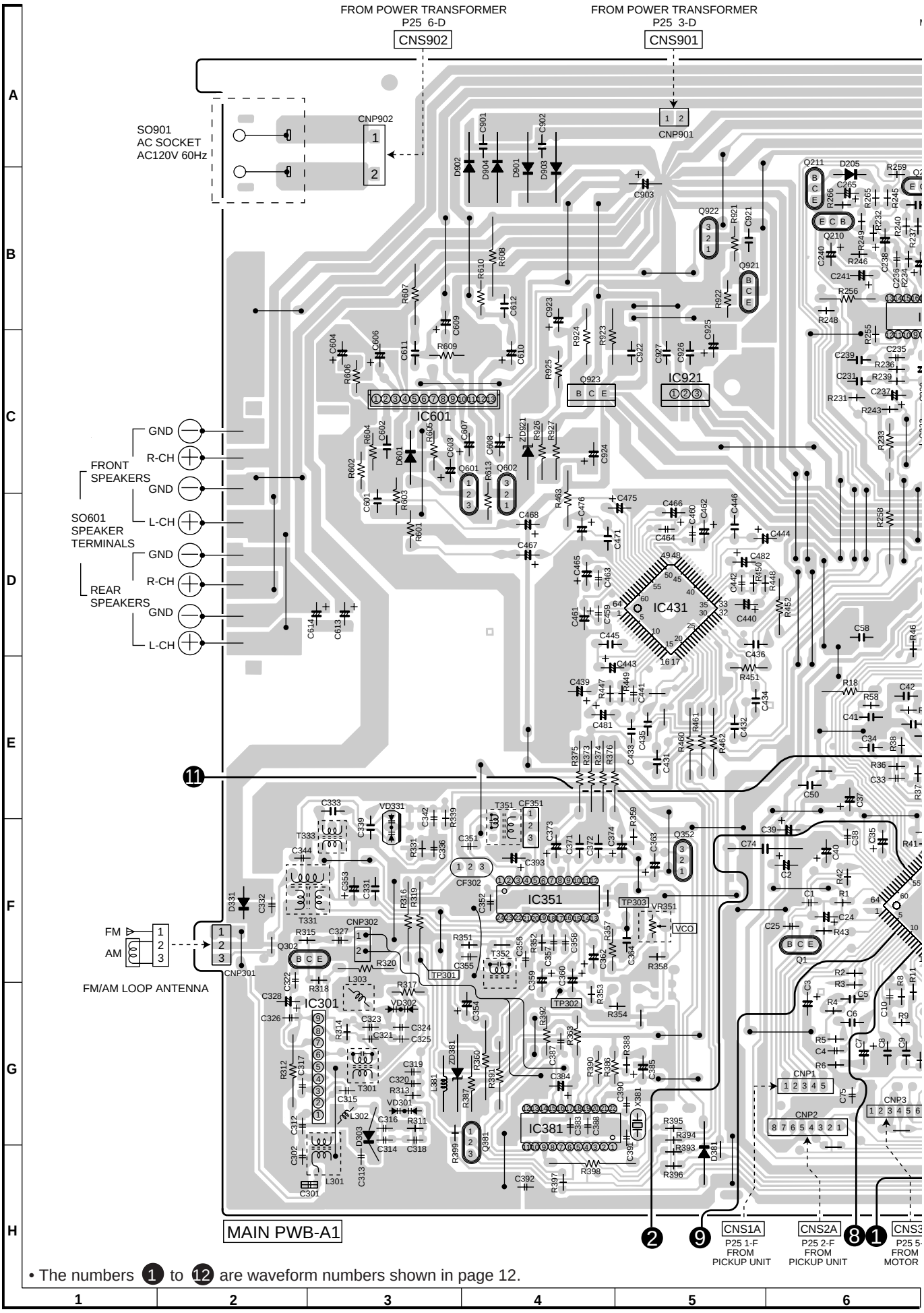
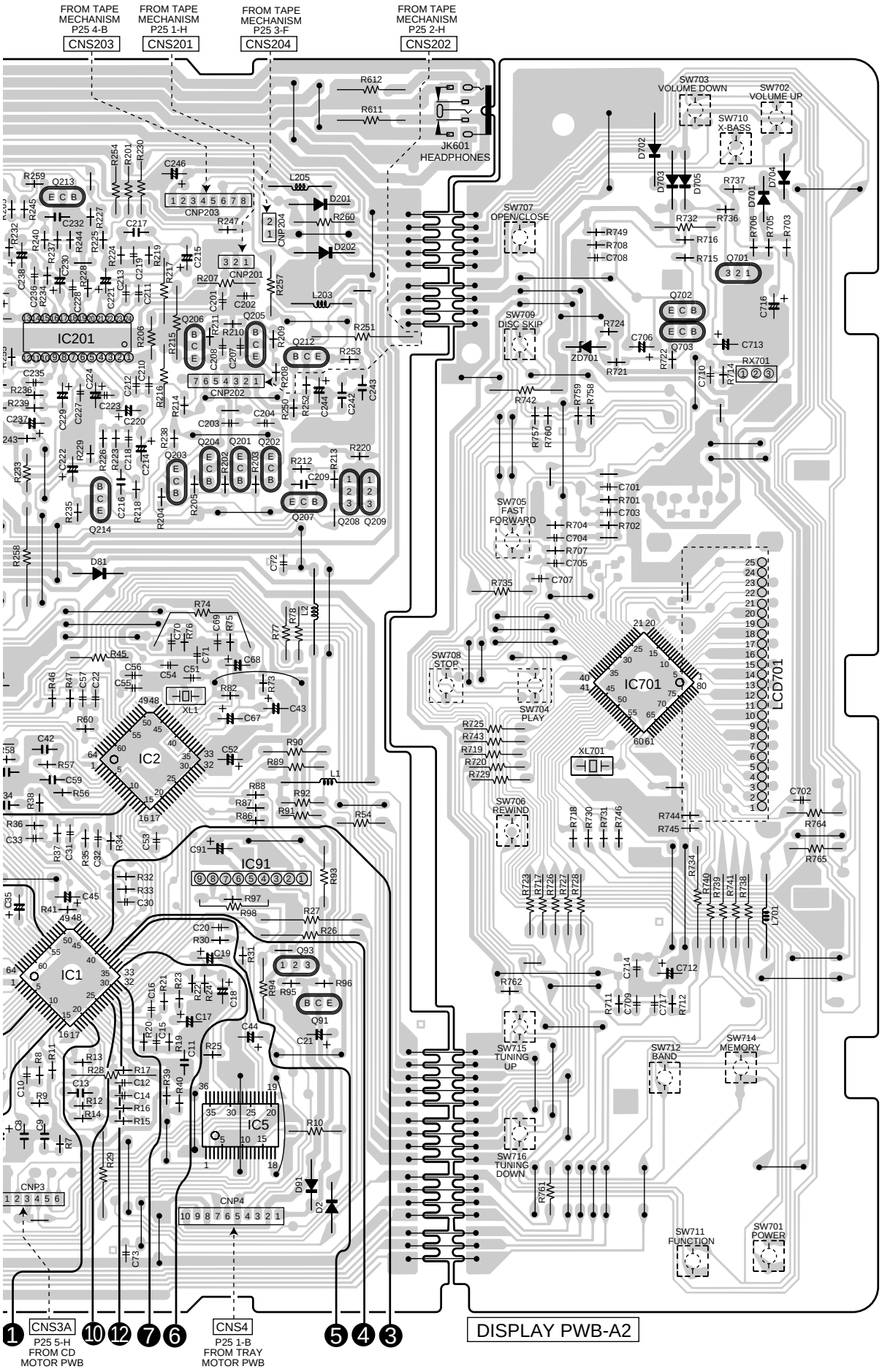


Figure 26 WIRING SIDE OF P.W.BOARD (2/3)



7	8	9	10	11	12

Figure 27 WIRING SIDE OF P.W.BOARD (3/3)

VOLTAGE

IC1	
PIN NO.	VOLTAGE
1	2.5V
2	2.5V
3	2.5V
4	2.5V
5	2.5V
6	2.5V
7	2.5V
8	2.5V
9	2.5V
10	2.5V
11	2.5V
12	2.5V
13	2.5V
14	2.5V
15	2.5V
16	2.5V
17	2.5V
18	2.5V
19	2.5V
20	2.5V
21	2.5V
22	0V
23	2.5V
24	2.5V
25	2.5V
26	2.5V
27	2.5V
28	2.5V
29	2.5V
30	2.5V
31	2.5V
32	0V
33	0V
34	0V
35	0V
36	0V
37	0V
38	0V
39	0V
40	0V
41	1.6V
42	2.5V
43	2.5V
44	2.5V
45	0V
46	2.5V
47	0V
48	0V
49	0V
50	2.5V
51	4V
52	4V
53	0V
54	0V
55	5V
56	5V
57	2.5V
58	2.5V
59	1V
60	1V
61	2.3V
62	5V
63	0V
64	5V

IC2	
PIN NO.	VOLTAGE
1	0V
2	0V
3	2.7V
4	0V
5	2.3V
6	5V
7	1V
8	0V
9	2.5V
10	2.5V
11	0V
12	0V
13	0V
14	5V
15	0V
16	0V
17	5V
18	5V
19	0V
20	0V
21	–
22	–
23	5V
24	0V
25	0V
26	0V
27	0V
28	0V
29	–
30	–
31	–
32	0V
33	0V
34	–
35	–
36	5V
37	2.5V
38	0V
39	0V
40	2.5V
41	4.9V
42	–
43	5V
44	1.9V
45	2.2V
46	0V
47	–
48	–
49	–
50	–
51	–
52	–
53	0V
54	0V
55	0V
56	4V
57	4V
58	0V
59	–
60	–
61	2.5V
62	0V
63	0V
64	0V

IC5	
PIN NO.	VOLTAGE
1	2.2V
2	2V
3	–
4	–
5	2.2V
6	2.2V
7	2.2V
8	0V
9	0V
10	0V
11	0V
12	2.2V
13	2.2V
14	2.2V
15	2.2V
16	–
17	5V
18	–
19	–
20	5V
21	2.2V
22	2.2V
23	2.2V
24	2.2V
25	2.2V
26	0V
27	0V
28	0V
29	0V
30	2.2V
31	2.2V
32	2.2V
33	–
34	–
35	–
36	–

IC351	
PIN NO.	VOLTAGE
1	1.7V(1.7V)
2	1.7V(1.7V)
3	5.5V(6.9V)
4	0.2V(0.8V)
5	1.7V(1.7V)
6	0V(0V)
7	5.5V(5.5V)
8	0V(0V)
9	2.4V(2.4V)
10	2.4V(2.4V)
11	4.8V(6.8V)
12	1V(1V)
13	1.1V(0V)
14	1.9V(1.7V)
15	1V(1.1V)
16	1.7V(1.7V)
17	1.7V(1.7V)
18	1.6V(1.6V)
19	0.4V(0.7V)
20	5.4V(6.8V)
21	5.4V(6.8V)
22	1.7V(1.7V)
23	1.7V(1.7V)
24	1.7V(1.7V)

IC201	
PIN NO.	VOLTAGE
1	0V(0V)
2	0V(0V)
3	0.6V(0.6V)
4	2.7V(2.7V)
5	0V(0V)
6	0V(1.2V)
7	0V(0V)
8	0.6V(0.6V)
9	2.7V(2.7V)
10	2.7V(2.7V)
11	0V(0V)
12	0V(0V)
13	5.6V(5.6V)
14	3.4V(3.4V)
15	0V(0V)
16	2.7V(2.7V)
17	0.6V(0.6V)
18	0V(0V)
19	0V(0.8V)
20	0V(0V)
21	2.7V(2.7V)
22	0.6V(0.6V)
23	0V(0V)
24	0V(0V)

IC301	
PIN NO.	VOLTAGE
1	0.7V(0V)
2	1.5V(0V)
3	4.9V(0V)
4	1.5V(0V)
5	0V(0V)
6	4.9V(0V)
7	4V(0V)
8	4.7V(0V)
9	4.9V(0V)

IC381	
PIN NO.	VOLTAGE
1	2.7V(2.7V)
2	0V(0V)
3	0V(0V)
4	0V(4.7V)
5	0V(0V)
6	4.9V(4.9V)
7	0.2V(11.2V)
8	0V(0V)
9	0V(0V)
10	1V(0V)
11	5.5V(5.5V)
12	0V(0V)
13	0.3V(0.3V)
14	0V(0V)
15	0V(2.7V)
16	2.5V(0V)
17	5.2V(5.2V)
18	0V(1V)
19	0V(1V)
20	11.2V(10.6V)
21	0V(0V)
22	2.7V(2.7V)

IC431	
PIN NO.	VOLTAGE
1	5.6V
2	5.6V
3	5.6V
4	5.6V
5	5.6V
6	5.6V
7	5.6V
8	5.6V
9	5.6V
10	5.6V
11	5.6V
12	5.6V
13	5.6V
14	5.6V
15	5.6V
16	5.6V
17	5.6V
18	0V
19	5.6V
20	0V
21	5.6V
22	0V
23	0V
24	0V
25	0V
26	0V
27	0V
28	5.6V
29	0V
30	5.6V
31	0V
32	5.6V
33	5.6V
34	5.6V
35	5.6V
36	5.6V
37	5.6V
38	5.6V
39	5.6V
40	5.6V
41	5.6V
42	5.6V
43	5.6V
44	5.6V
45	5.6V
46	5.6V
47	5.6V
48	5.6V
49	5.6V
50	5.6V
51	5.6V
52	0V
53	5.6V
54	0V
55	5.6V
56	5.6V
57	11.3V
58	5.6V
59	0V
60	5.6V
61	0V
62	5.6V
63	5.6V
64	5.6V

IC701			
PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.2V	41	0V
2	2.2V	42	0V
3	2.2V	43	4.3V
4	2.2V	44	4.3V
5	2.2V	45	0V
6	2.2V	46	2.2V
7	2.2V	47	0V
8	2.2V	48	3.7V
9	2.2V	49	3.7V
10	2.2V	50	2.2V
11	2.2V	51	0V
12	2.2V	52	4.2V
13	2.2V	53	0V
14	2.2V	54	4.3V
15	2.2V	55	–
16	2.2V	56	–
17	2.2V	57	4.3V
18	2.2V	58	2.2V
19	2.2V	59	1.8V
20	2.2V	60	4.2V
21	2.2V	61	4.2V
22	2.2V	62	4.3V
23	2.2V	63	4.3V
24	2.2V	64	0V
25	4.3V	65	0V
26	4.3V	66	0V
27	3V	67	0V
28	1.5V	68	4.2V
29	4.3V	69	2.2V
30	4.3V	70	2.2V
31	4.3V	71	2.2V
32	4.3V	72	2.2V
33	0V	73	2.2V
34	4.3V	74	2.2V
35	4.3V	75	2.2V
36	4.3V	76	2.2V
37	4.3V	77	2.2V
38	4.3V	78	2.2V
39	4V	79	2.2V
40	4V	80	2.2V

IC601	
PIN NO.	VOLTAGE
1	1.3V
2	0V
3	14V
4	0V
5	14V
6	0V
7	1.3V
8	14.7V
9	13V
10	7V
11	0V
12	7V
13	13V

IC91	
PIN NO.	VOLTAGE
1	2.2V
2	11.2V
3	0V
4	–
5	0V
6	11.2V
7	0V
8	4.2V
9	2.2V

IC921	
PIN NO.	VOLTAGE
1	17.6V
2	0V
3	5V

TROUBLESHOOTING

When the CD does not function

When the CD section does not operate. When the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the troubleshooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.
Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.
Do not touch the lens with the bare hand.

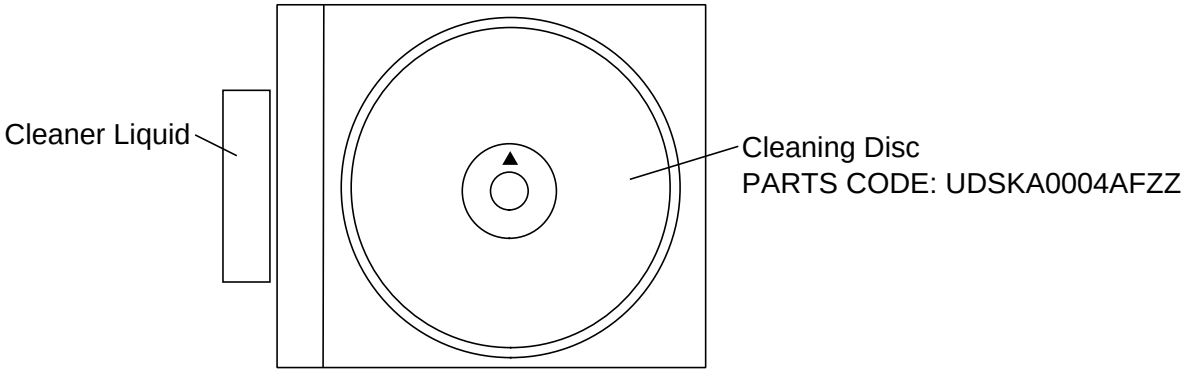
Dust gradually accumulates on the objective lens during use, and it may degrade performance. To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

HOW TO USE

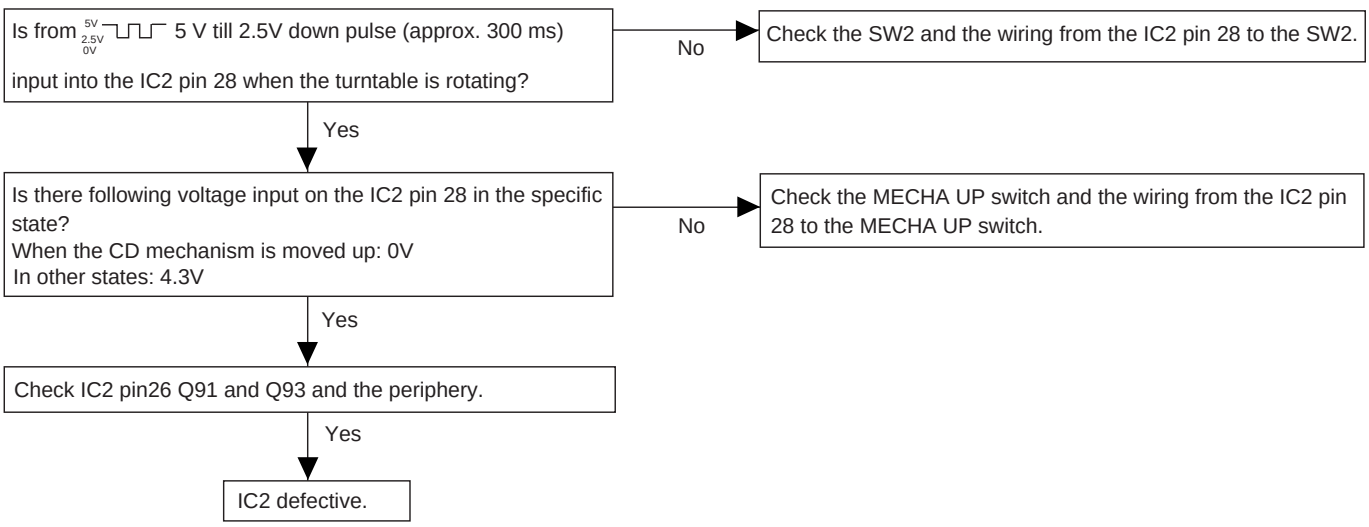
1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the ▲ mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continues to turn, press the stop button.

CAUTION

- The CD lens cleaner should be effective for 30~50 operations, however if the brushes become worn out earller then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is prohibited by law.

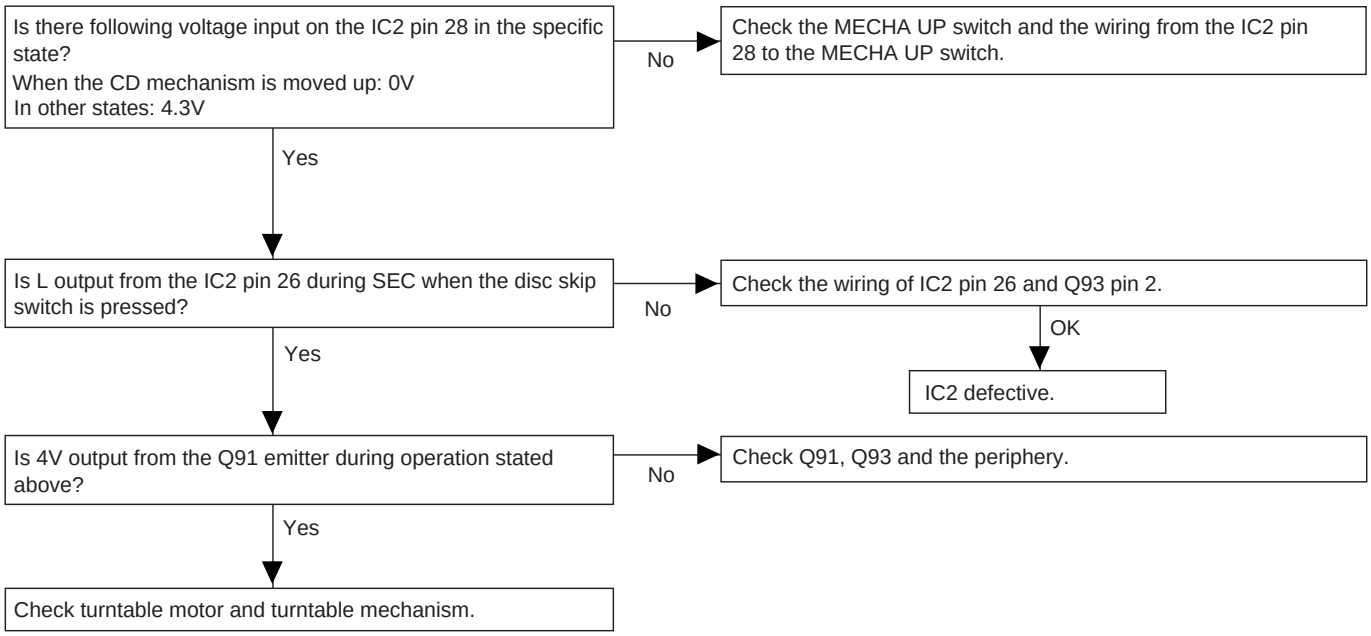


• When the turntable fails to stop.

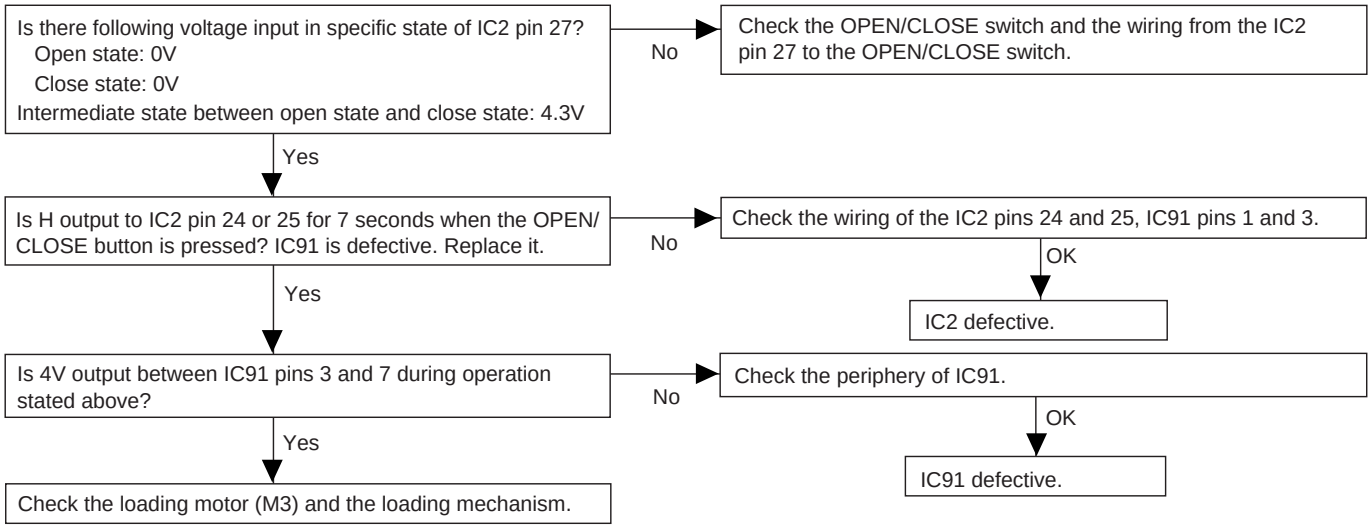

Is from 5V 2.5V 0V 5 V till 2.5V down pulse (approx. 300 ms) input into the IC2 pin 28 when the turntable is rotating?
No
Check the SW2 and the wiring from the IC2 pin 28 to the SW2.
Yes
Is there following voltage input on the IC2 pin 28 in the specific state?
When the CD mechanism is moved up: 0V
In other states: 4.3V
No
Check the MECHA UP switch and the wiring from the IC2 pin 28 to the MECHA UP switch.
Yes
Check IC2 pin26 Q91 and Q93 and the periphery.
Yes
IC2 defective.

CD-C602,CP-C602

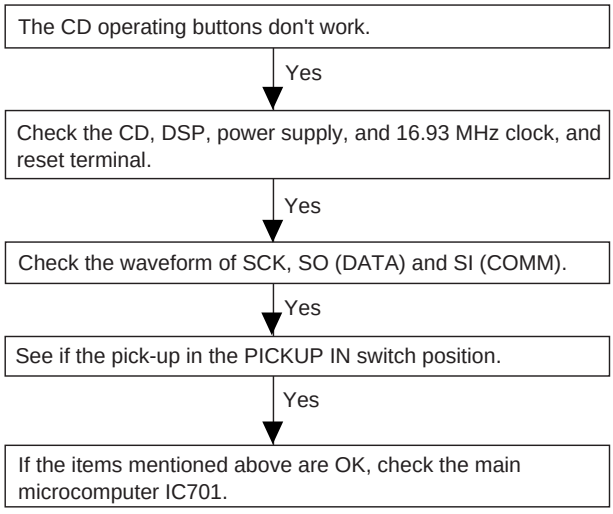
• When turntable fails to move.


Is there following voltage input on the IC2 pin 28 in the specific state?
When the CD mechanism is moved up: 0V
In other states: 4.3V
No
Check the MECHA UP switch and the wiring from the IC2 pin 28 to the MECHA UP switch.
Yes
Is L output from the IC2 pin 26 during SEC when the disc skip switch is pressed?
No
Check the wiring of IC2 pin 26 and Q93 pin 2.
OK
IC2 defective.
Yes
Is 4V output from the Q91 emitter during operation stated above?
No
Check Q91, Q93 and the periphery.
Yes
Check turntable motor and turntable mechanism.

• When the CD tray fails to open or close.


Is there following voltage input in specific state of IC2 pin 27?
Open state: 0V
Close state: 0V
Intermediate state between open state and close state: 4.3V
No
Check the OPEN/CLOSE switch and the wiring from the IC2 pin 27 to the OPEN/CLOSE switch.
Yes
Is H output to IC2 pin 24 or 25 for 7 seconds when the OPEN/CLOSE button is pressed? IC91 is defective. Replace it.
No
Check the wiring of the IC2 pins 24 and 25, IC91 pins 1 and 3.
OK
IC2 defective.
Yes
Is 4V output between IC91 pins 3 and 7 during operation stated above?
No
Check the periphery of IC91.
OK
IC91 defective.
Yes
Check the loading motor (M3) and the loading mechanism.

• The CD function will not work.


The CD operating buttons don't work.
Yes
Check the CD, DSP, power supply, and 16.93 MHz clock, and reset terminal.
Yes
Check the waveform of SCK, SO (DATA) and SI (COMM).
Yes
See if the pick-up in the PICKUP IN switch position.
Yes
If the items mentioned above are OK, check the main microcomputer IC701.

• The CD operating keys work.

Check the Focus - HF system.

Playback can be performed without a disc.

Yes

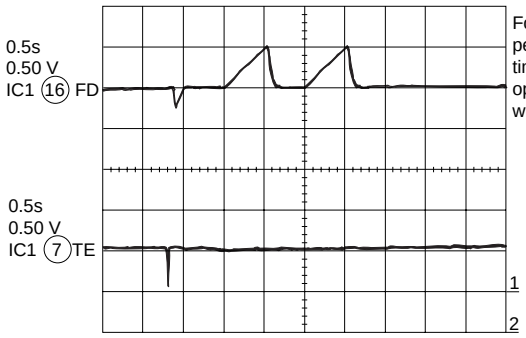
Does the pick-up move up and down twice? → Yes → Focus search OK

No

Does the output waveform of IC1(16)(FD) match that shown in Fig. 31-1? → Yes → Check the area around IC5-CNP2.

No

Check the IC1(50)(CLK) line, 4MHz.
Check the microcomputer data on pins (51)(CL), (52)(DAT) and (53)CE.



Focus search is performed two times when play operation is done without disc.

Figure 31-1

• Playback can only be performed when a disc is loaded.

Is the Focus servo active? (Can you hear it working?) → No → Check the laser diode driver. Check the area around IC1(16) - (21) (focus servo circuit).

Yes

Does the DRF signal change from "L" to "H"? → No → If the disc is not turning, the DRF should not change to "H". → Yes → Check the spin system.

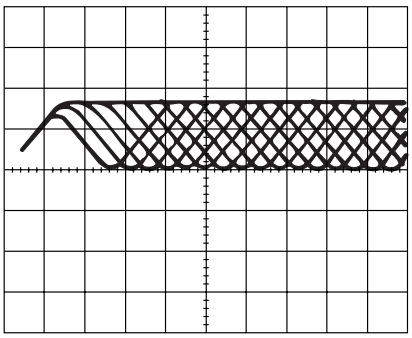
Yes

Is HF waveform normal (see the Fig. 31-2, Fig. 31-3)? → No → Level is abnormal. → Yes → Check the periphery of IC1 pins 41 and 42.

No → Waveform is unstable. → Yes → Check the spin system.

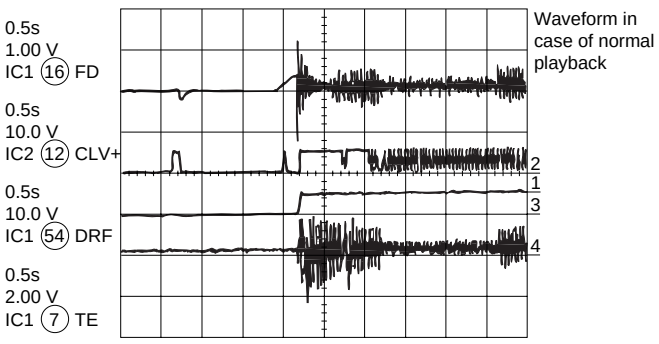
Yes

Check the tracking system.



HF
1.0V/DIV
0.5µsec/DIV(DC)
(When playing back the disc)

Figure 31-2



Waveform in case of normal playback

Figure 31-3

• Check the tracking system.

Check waveform of IC1 pin 7 (TE).

- The waveform shown in Fig. 32-1 appears, and no-disc state appears soon. → Yes → Tracking servo is inoperative. → Yes → Check the periphery of IC 1 pin 8 to pin 15, and IC 5 to CNP2.
- Play is possible in TEST mode. → Yes → Although IL is possible, play is impossible. → Yes → Normal jump is impeded, and the program top cannot be reached. → Yes → Check the periphery of IC 1 pin 14.
- Data cannot be read. → Yes → Check the VCO-PLL system.

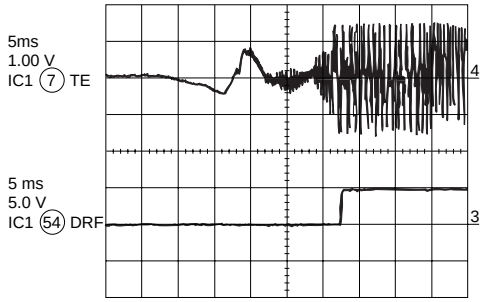


Figure 32-1

• Checking the spin system.

Play operation is performed without disc.

↓ Yes

The turntable rotates a little. → Yes → The spin driver circuit is normal.

↓ No

The turntable fails to rotate or rotates at high speed. → Yes → Check the periphery of IC1 pins 23 to 27, pin 39, and pin 40, IC2 pin 12 and pin 13, IC5 to CNP3.

• Checking the VCO-PLL system

Play operation is performed when disc exits.

↓ Yes

Although HF waveform is normal, TOC data cannot be read. → Yes → Check PDO waveform (Fig. 32-2).

↓ Abnormal

Check the IC1 pins 43 and 44, IC2 pins 3, 5, 7, 10, and 11.

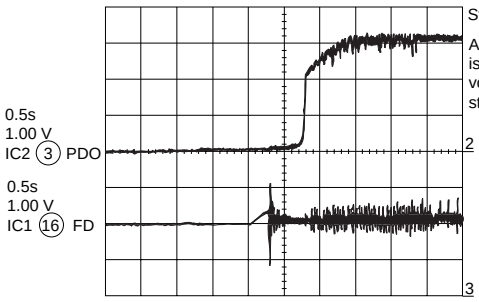


Figure 32-2

• Although HF waveform is normal and the time indication is normal, no sound is emitted.

Check IC2 pin 48 (EFLG). → No → Usually, the number of pulses of flawless disc is 100 pulses/sec or less.

↓ Yes

Check IC2 pins 37, 40.

↓ Abnomal

Check IC431 and POWER AMP. IC601.

FUNCTION TABLE OF IC

IC1 VHiLA9241M/-1: Servo Amp., (LA9241M) (1/2)

Pin No.	Port Name	Function
1	FIN2	Connection pin for photodiode of pickup. RF signal is generated through addition with FIN pin, and FE signal is generated through subtraction.
2	FIN1	Connection pin for photodiode of pickup.
3	E	Connection pin for photodiode of pickup. TE signal is generated through subtraction with F pin.
4	F	Connection pin for photodiode of pickup.
5	TB	Pin for input of DC component of TE signal.
6	TE-	Pin to connect gain setting resistor of TE signal to TE signal.
7	TE	TE signal output pin.
8	TESI	TES (Track error sense) comparator input pin. TE signal is band-passed and input.
9	SCI	Input pin for shock detection.
10	TH	Pin to set time constant of tracking gain.
11*	N.C.	No connect.
12	TD-	Pin to compose tracking phase compensation constant between TD and VR pins.
13	TD	Pin to set tracking phase compensation.
14	JP	Pin to set amplitude of tracking jump signal (kick pulse).
15	TO	Tracking control signal output pin.
16	FD	Focusing control signal output pin.
17	FD-	Pin to compose focusing phase compensation constant between FD and FA pins.
18	FA	Pin to compose focusing phase compensation constant between FD-/FA-pins.
19	FA-	Pin to compose focusing phase compensation constant between FA and FE pins.
20	FE	Output pin of FE signal.
21	FE-	Pin to connect gain setting resistor of FE signal across TE pin.
22	AGND	GND for analog signal.
23	SP	Single end output for CV+ and CV- pin input.
24	SPI	Spindle amplifier input.
25	SPG	Pin to connect gain setting resistor in the 12cm mode of spindle.
26	SP-	Pin to connect spindle phase compensation constant together with SPD pin.
27	SPO	Spindle control signal output pin.
28	SLEO	Pin to connect thread phase compensation constant.
29	SLD	Thread control signal output pin.
30	SL-	Input pin of thread feed signal from microcomputer.
31	SL+	Input pin of thread feed signal from microcomputer.
32	JP-	Input pin of tracking jump signal from DSP.
33	JP+	Input pin of tracking jump signal from DSP.
34	TGL	Input pin of tracking gain control signal from DSP. TGL = Gain low at "H"
35	TOFF	Input pin of tracking off control signal from DSP. TOFF = Off at "H"
36	TES	Output pin of TES signal to DSP.
37	HFL	(HIGH FREQUENCY LEVEL) is used to judge whether main beam is positioned on the bit or on the mirror.
38	SLOF	Thread servo off control input pin.
39	CV-	Pin to input CLV error signal from DSP.
40	CV+	Pin to input CLV error signal from DSP.
41	RFSM	RF output pin.
42	RFS-	Pin to set gain of RF and set 3T compensation constant together with RFSM pin.
43	SLC	(SLICE LEVEL CONTROL) is the output pin to control of the level of the data slice with RF waveform DSP.
44	SLI	Input pin to control the level of data slice with DSP.
45	DGND	GND pin in the digital system.
46	FSC	Output pin for focus search smoothening capacitor.
47	TBC	(Tracking Balance Control) Pin to set EF balance variable range.
48*	NC	No connect.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC1 VHiLA9241M/-1: Servo Amp., (LA9241M) (2/2)

Pin No.	Port Name	Function
49	DEF	Defect detection output pin of disc.
50	CLK	Reference clock input pin. 4.23MHz of DSP is input.
51	CL	Microcomputer command clock input pin.
52	DAT	Microcomputer command data input pin.
53	CE	Microcomputer command chip enable input pin.
54	DRF	(DETECT RF) RF level detection output.
55	FSS	(Focus Serch Select) Pin to switch focus search mode. (± search/+ search for reference voltage)
56	VCC2	VCC pin for servo system and digital system.
57	REF1	Pin to connect pass control for reference voltage.
58	VR	Reference voltage output pin.
59	LF2	Pin to set defect detection time constant of disc.
60	PHI	Pin to connect capacitor for peak hold of RF signal.
61	BHI	Pin to connect capacitor for bottom hold of RF signal.
62	LDO	APC circuit output pin.
63	LDS	APC circuit output pin.
64	VCC1	RF system VCC pin.

IC5 VHiM56748FP-1: Focus/Tracking/Spin/Slide Driver (M56748FP)

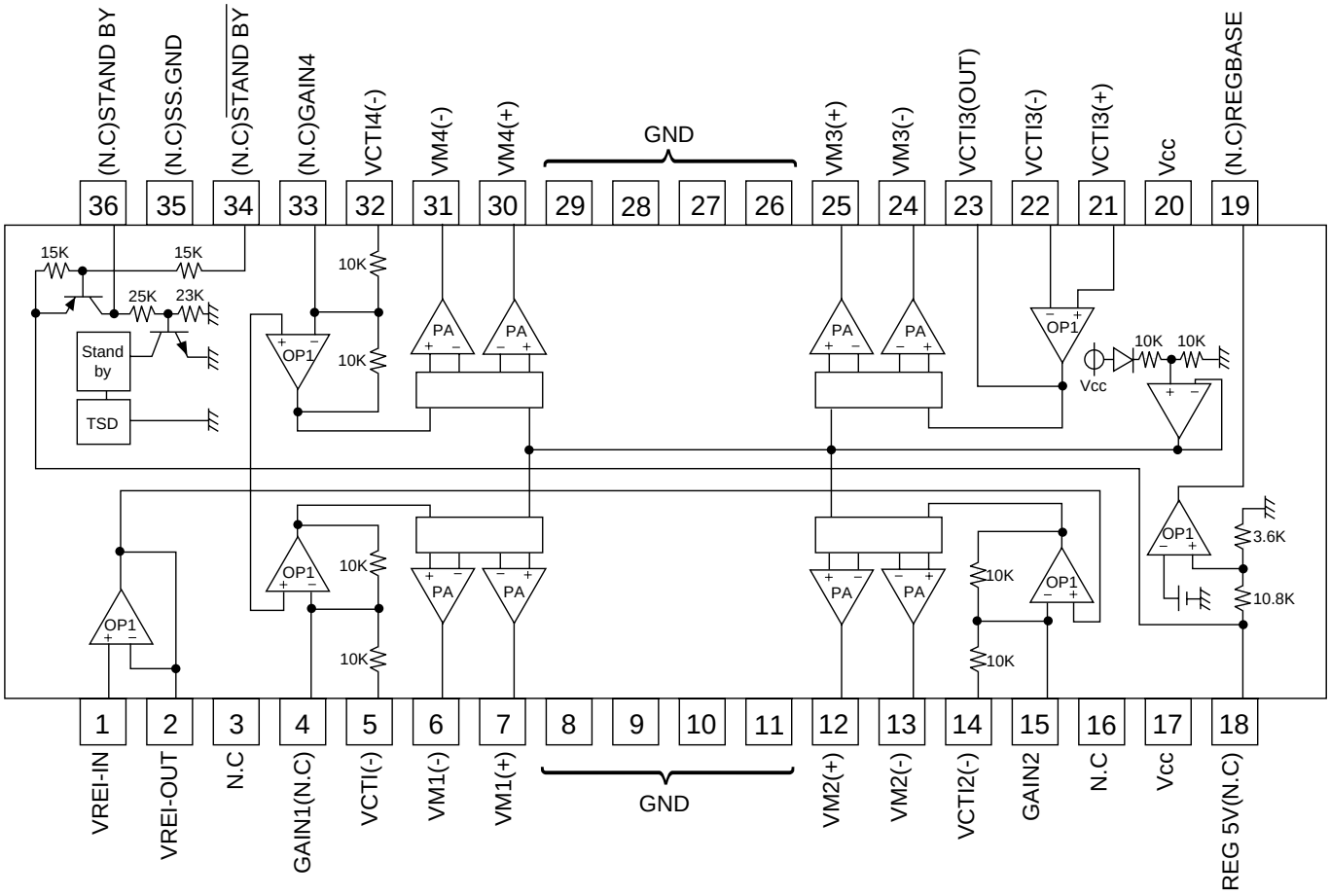


Figure 34 BLOCK DIAGRAM OF IC

IC2 VHiLC78622N-1: Servo/Signal Control (LC78622N) (1/2)

Pin No.	Terminal Name	Input/Output	Function		
1	DEFI	Input	Input terminal of defect detection signal (DEF). (Connected to OV when not used.)		
2	TAI	Input	For PLL	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.	
3	PDO	Output	For PLL	Output terminal of phase comparison for external VCO control.	
4	VVSS	—	For PLL	Ground terminal for integrated VCO. Surely connected to 0V.	
5	ISET	Input	For PLL	Resistance connection terminal for current adjustment of PDO output.	
6	VVDD	—	For PLL	Power terminal for integrated VCO.	
7	FR	Input	For PLL	VCO frequency range adjustment.	
8	VSS	—	Ground terminal of digital system. Surely connected to 0V.		
9	EFMO	Output	For slice level control	EFM signal output terminal.	
10	EFMIN	Input	For slice level control	EFM signal input terminal.	
11	TEST2	Input	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.		
12	CLV+	Outout	Output for disc motor control. 3 values can be output with the commands.		
13	CLV-	Output	Output for disc motor control. 3 values can be output with the commands.		
14	V/P	Output	Monitor output terminal for automatic switch of rough servo/phase control. "H" for rough servo, and "L" for phase servo.		
15	HLF	Intput	Input terminal of track detection signal. Schmit input.		
16	TES	Input	Input terminal of tracking error signal. Schmit input.		
17	TOFF	Output	Tracking OFF output terminal.		
18	TGL	Output	Output terminal for switch of tracking gain "L" increases the gain.		
19	JP+	Output	Output for track jump control. 3 values can be output with the commands.		
20	JP-	Output	Output for track jump control. 3 values can be output with the commands.		
21*	PCK (NC)	Output	Clock monitor terminal for EFM data replay. 4,3218MHz as the phase clock.		
22*	FSEQ (NC)	Output	Output terminal synchronous signal detection. "H" is output when synchronous signal detected by EFM signal matches synchronous signal internally generated.		
23	VDD	—	Power terminal of digital system.		
24	CONT1	Input/Output	General purpose input/output terminal 1	Controlled with serial data command from microcomputer. When not used, set it as the input terminal and open it by connecting to 0V, or set it as the output terminal and open it.	
25	CONT2	Input/Output	General purpose input/output terminal 2		
26	CONT3	Input/Output	General purpose input/output terminal 3		
27	CONT4	Input/Output	General purpose input/output terminal 4		
28	CONT5	Input/Output	General purpose input/output terminal 5		
29*	EMPH (NC)	Output	Difference monitor terminal At "H", deemphasis disk is being replayed.		
30*	C2F (NC)	Output	C2 flag output terminal.		
31*	DOUT (NC)	Output	Output terminal of digital OUTPUT. (EIAJ format)		
32	TEST3	Input	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.		
33	TEST4	Input	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.		
34*	N.C.	—	Terminal not used. Open during operation.		
35*	MUTEL (NC)	Output	L channel 1 bit DAC	Mute output terminal for L channel.	
36	LVDD	—	L channel 1 bit DAC	Power terminal for L channel.	
37	LCHO	Output	L channel 1 bit DAC	L channel output terminal.	
38	LVSS	—	L channel 1 bit DAC	Ground terminal for L channel. Surely connected to 0V.	
39	RVSS	—	R channel 1 bit DAC	Ground terminal for R channel. Surely connected to 0V.	
40	RCHO	Output	R channel 1 bit DAC	R channel output terminal.	
41	RVDD	—	R channel 1 bit DAC	Power terminal for R channel.	
42*	MUTER (NC)	Output	R channel 1 bit DAC	Mute output terminal for R channel.	
43	XVDD	—	Power terminal for quartz oscillation.		
44	XOUT	Output	Ground terminal of 16.9344 MHz quartz oscillator.		
45	XIN	Input	Ground terminal of 16.9344 MHz quartz oscillator.		
46	XVSS	—	Ground terminal for quartz oscillation. Surely connected to 0V.		
47*	SBSY (NC)	Output	Output terminal of synchronous signal of subcode block.		
48*	EFLG (NC)	Output	Correction monitor terminal of C1, C2, single and double.		
49*	PW (NC)	Output	Output terminal of subcodes P, A, R, S, T, U and W.		

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC2 VHiLC78622N-1: Servo/Signal Control (LC78622N) (2/2)

Pin No.	Terminal Name	Input/Output	Function
50*	SFSY (NC)	Output	Output terminal of synchronous signal of subcode frame. It drops when subcode stands by.
51	SBCK	Input	Clock input terminal to read subcode. Schmit input (Connected to 0V when not used.)
52*	FSX (NC)	Output	Output terminal of synchronous signal of 7.35kHz divided from quartz oscillation.
53	WRQ	Output	Output terminal to stand by output of subcode Q.
54	RWC	Input	Input terminal of read/write. Schmit input.
55	SQOUT	Output	Output terminal of subcode Q.
56	COIN	Input	Command input terminal from microcomputer.
57	/CQCK	Input	Clock input terminal to fetch command input, or pick up subcode from SQOUT. Schmit input.
58	/RES	Input	Reset input terminal of LC78622. When turning on power, set it at "L".
59*	TEST11 (NC)	Output	Output terminal for test. Used in the open state ("L" output as ordinary).
60*	16M (NC)	Output	Output terminal of 16.9344Hz.
61	4M	Output	Output terminal of 4.2336MHz.
62	TEST5	Input	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.
63	/CS	Input	Chip selection input terminal. Pull-down resistor is integrated. Connected to 0when not controlled.
64	TEST1	Input	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.

Note: The same potential must be supplied to the power terminals (VDD, VVDD, LVDD, RVDD, XVDD).
In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0217AWZZ: System Microcomputer (IX0217AW)

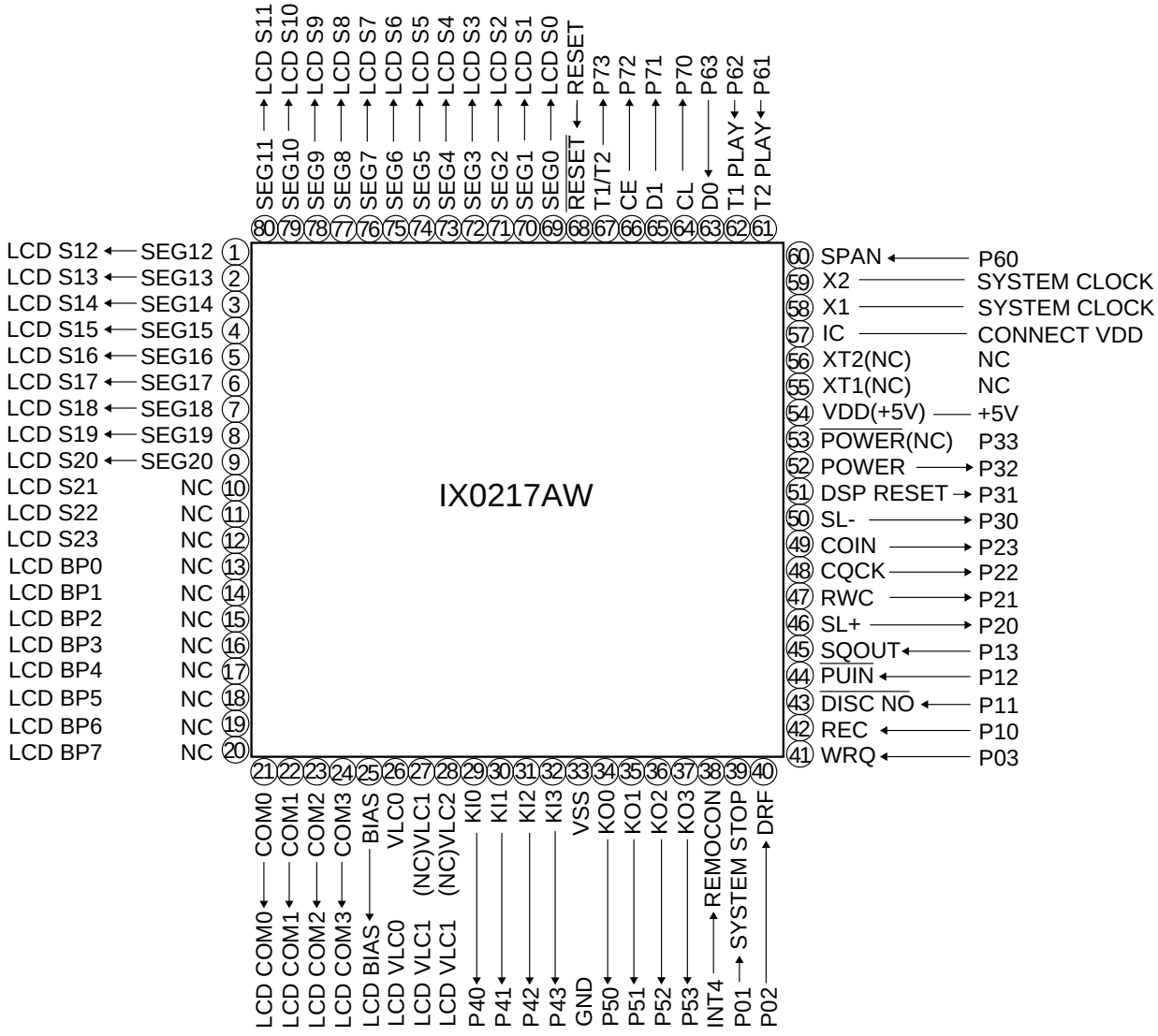


Figure 36 BLOCK DIAGRAM OF IC

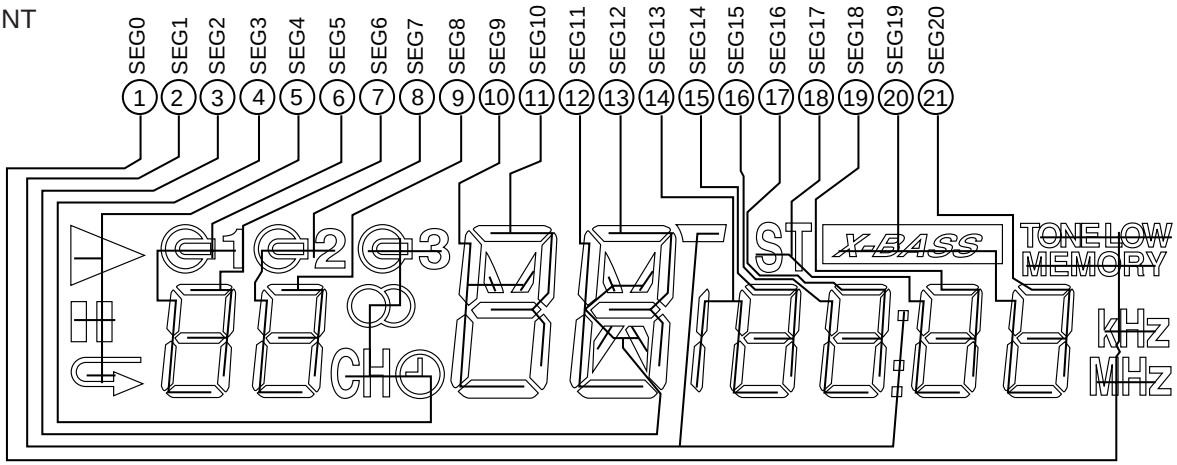
IC701 RH-iX0217AWZZ: System Microcomputer (IX0217AW)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1-9	S12-S20	SEG12-SEG20	Output	LCD Segment
10*-12*	S21-S23	N.C.	—	Not connect
13*-20*	BP0-BP7	N.C.	—	Not connect
21-24	COM0-COM3	COM0-COM3	Output	LCD Common
25	BIAS	BIAS	Output	LCD Bias
26	VLC0	VLC0	—	LCD Bias
27*	VLC1	(N.C.) VLC1	—	Not connect
28*	VLC2	(N.C.) VLC2	—	Not connect
29	P40	KI0	Input	Key In 0
30	P41	KI1	Input	Key In 1
31	P42	KI2	Input	Key In 2
32	P43	KI3	Input	Key In 3
33	VSS	VSS	—	VSS
34	P50	KO0	Output	Key Out 0
35	P51	KO1	Output	Key Out 1
36	P52	KO2	Output	Key Out 2
37	P53	KO3	Output	Key Out 3
38	P00	REMOCON	Input	Remocon Input
39	P01	SYSTEM STOP	Input	System stop detect
40	P02	DRF	Input	Focus ok flug
41	P03	WRQ	Input	Write request from contrroer
42	P10	REC	Input	REC ON
43	P11	$\overline{\text{DISC NO.}}$	Input	Disc No. detector
44	P12	$\overline{\text{PU IN}}$	Input	Pickup In side switch
45	P13	SQOUT	Input	SQ data from DSP
46	P20	SL+	Output	Slide +
47	P21	RWC	Output	Read/Write control
48	P22	CQCK	Output	Clock for CD DSP
49	P23	COIN	Output	Command data for DSP
50	P30	SL–	Output	Slide –
51	P31	DSP RST	Output	CD DSP Reset
52	P32	POWER	Output	Power ON/OFF control
53*	P33	$\overline{\text{POWER}}$ (N.C.)	—	Not connect
54	VDD	VDD (+5V)	—	VDD +5V
55*	XT1	XT1 (N.C.)	—	Not connect
56*	XT2	XT2 (N.C.)	—	Not connect
57	IC	IC	—	Connect to VDD
58	X1	X1	—	X-TAL OSC IN
59	X2	X2	—	X-TAL OSC OUT
60	P60	SPAN	Input	Span selector 9K/10K
61	P61	T2 PLAY	Input	Tape 2 Play detect
62	P62	T1 PLAY	Input	Tape 1 Play detect
63	P63	D0	Input	Data in to VOL/PLL
64	P70	CL	Output	Clock for VOL/PLL
65	P71	DI	Output	Data in to VOL/PLL
66	P72	CE	Output	Chip enable for VOL/PLL
67	P73	T1/T2	Output	Tape play SW H: Tape 1 L: Tape 2
68	RESET	$\overline{\text{RESET}}$	Input	System reset
69-80	S0-S11	SEG0-SEG11	Output	LCD Segment

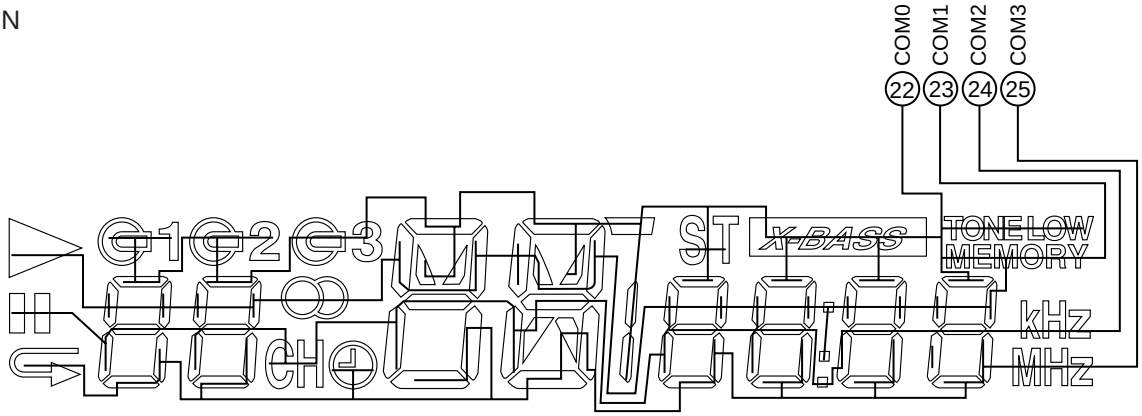
In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

LCD701: RV-LX0024AWZZ LCD Display

SEGMENT


SEG0 SEG1 SEG2 SEG3 SEG4 SEG5 SEG6 SEG7 SEG8 SEG9 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15 SEG16 SEG17 SEG18 SEG19 SEG20
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
ST
X-BASS
TONE LOW
MEMORY
kHz
MHz

COMMON



PIN	COM1	COM2	COM3	COM4
1	TONE LOW	MEMORY	kHz	MHz
2	X9	COL	DP	NC
3	4I	4H	4K	4J
4	X6	X7	CH	X8
5	NC	X1	X2	X3
6	X4	1F	1E	1D
7	1A	1B	1G	1C
8	X5	2F	2E	2D
9	2A	2B	2G	2C
10	3H,3I	3F	3E	3D
11	3A	3B	3G	3C
12	NC	4F	4E	4D
13	4A	4B	4G	4C
14	5B,5C	6F	6E	6D
15	6A	6B	6G	6C
16	NC	7F	7E	7D
17	7A	7B	7G	7C
18	ST	8F	8E	8D
19	8A	8B	8G	8C
20	X-BASS	9F	9E	9D
21	9A	9B	9G	9C
22	COM1	NC	NC	NC
23	NC	COM2	NC	NC
24	NC	NC	COM3	NC
25	NC	NC	NC	COM4

Figure 38 LCD SEGMENT

SHARP PARTS GUIDE

MODEL CD-C602
CP-C602

CD-C602 mini component system consisting of
CD-C602 mini component system, CP-C602 and rear
(GBOXS0020AWM1) speaker system.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK ..... Ceramic type
VCT ..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN ..... Cylindrical type (without lead wire)
VC • • TV ..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS ..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN ..... Cylindrical type (without lead wire)
VR • • TV ..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

CD-C602,CPC602

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

CD-C602

INTEGRATED CIRCUITS

IC1	VHILA9241M/-1	J	AS	Servo Amp.,LA9241M
IC2	VHILC78622N-1	J	AY	Servo/Signal Control,LC78622N
IC5	VHIM56748FP-1	J	AR	Focus/Tracking/Spin/Slide Driver,M56748FP
IC91	VHITA7291S/-1	J	AH	Loading Motor Driver,TA7291S
IC201	VHIAN7345K/-1	J	AM	Playback and Record/Playback Amp.,AN7345K
IC301	VHITA7358AP-1	J	AG	FM Front End,TA7358AP
IC351	VHILA1805//-1	J	AM	FM IF DET./FM MPX./AM IF, LA1805
IC381	VHILC72131/-1	J	AP	PLL Controller,LC72131
IC431	VHILC75394E-1	J	AX	Audio Processor,LC75394E
IC601	VHILA4597//-1	J	AH	Power Amp.,LA4597
IC701	RH-IX0217AWZZ	J	AX	System Microcomputer, IX0217AW
IC921	VHIKIA7805P-1	J	AF	Voltage Regulator,KIA7805P

TRANSISTORS

Q1	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q91	VSKTA1271Y/-1	J	AC	Silicon,PNP,KTA1271 Y
Q93	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q201~204	VS2SC2389SE-1	J	AD	Silicon,NPN,2SC2389 SE
Q205,206	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q207	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q208,209	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q210,211	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q212	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q213,214	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q302	VSKTC3194Y/-1	J	AD	Silicon,NPN,KTC3194 Y
Q352	VSKRA109M//-1	J	AC	Digital,PNP,KRA109 M
Q381	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q601	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q602	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q701	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q702,703	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q921	VSKTA1271Y/-1	J	AC	Silicon,PNP,KTA1271 Y
Q922	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q923	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y

DIODES

D2	VHD1SS133//-1	J	AA	Silicon,1SS133
D81	VHD1SS133//-1	J	AA	Silicon,1SS133
D91	VHD1SS133//-1	J	AA	Silicon,1SS133
D201,202	VHD1N4004S/-1	J	AB	Silicon,1N4004S
D205	VHD1SS133//-1	J	AA	Silicon,1SS133
D303	VHD1SS133//-1	J	AA	Silicon,1SS133
D331	VHD1SS133//-1	J	AA	Silicon,1SS133
D381	VHD1SS133//-1	J	AA	Silicon,1SS133
D601	VHD1SS133//-1	J	AA	Silicon,1SS133
D701~705	VHD1SS133//-1	J	AA	Silicon,1SS133
D901~904	VHDRL203F//-1	J	AE	Silicon,RL203F
VD301,302	VHCSVC211C/-1	J	AG	Variable Capacitance,SVC211C
VD331	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
ZD381	VHEMTZJ5R1B-1	J	AC	Zener,5.1V,MTZJ5.1B
ZD701	VHEMTZJ3R3B-1	J	AA	Zener,3.3V,MTZJ3.3B
ZD921	VHEMTZJ130A-1	J	AC	Zener,13V,MTZJ13A

FILTERS

CF302	RFILF0124AFZZ	J	AD	FM IF,10.7 MHz
CF351	92LFILTA1768A	J	AE	AM IF

TRANSFORMERS

⚠	PT901	RTRNP0238AWZZ	J	AY	Power
	T301	RCILI0012AWZZ	J	AD	FM IF
	T331	RCILA0052AWZZ	J	AE	AM Antenna
	T333	RCILB0058AWZZ	J	AC	AM Oscillation
	T351	RCILI0015AWZZ	J	AE	AM IF
	T352	RCILI0016AWZZ	J	AC	FM Detection

COILS

L1	VP-XHR82K0000	J	AC	0.82 µH,Choke
L2	VP-CH270K0000	J	AB	2.7 µH,Choke
L203	VP-CH331K0000	J	AB	330 µH,Choke
L205	VP-CH101K0000	J	AB	100 µH,Choke
L301	RCILF0001AWZZ	J	AC	FM Band Pass Filter
L302	RCILR0029AWZZ	J	AA	FM RF
L303	RCILB0060AWZZ	J	AC	FM Oscillation
L381	VP-DH101K0000	J	AB	100 µH,Choke
L701	VP-CH101K0000	J	AB	100 µH,Choke

VARIABLE RESISTOR

VR351	RVR-M0025AWZZ	J	AC	6.8 kohms (B),Semi-VR [VCO]

VIBRATORS

X381	RCRSP0002AWZZ	J	AH	Crystal,4.5 MHz
XL1	92LCRSTL1746AT	J	AH	Crystal,16.9344 MHz
XL701	92LCRSTL-1595A	J	AE	Crystal,4.19 MHz

CAPACITORS

C1	VCTYMN1CY103N	J	AA	0.01 µF,16V
C2	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C3	VCEAEA1HW104M	J	AB	0.1 µF,50V,Electrolytic
C4	VCKYMN1HB102K	J	AA	0.001 µF,50V
C5,6	VCQYKA1HM333K	J	AB	0.033 µF,50V,Mylar
C7	VCEAEA1HW104M	J	AB	0.1 µF,50V,Electrolytic
C8	VCQYKA1HM683K	J	AB	0.068 µF,50V,Mylar
C9	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C10	VCKYMN1HB181K	J	AA	180 pF,50V
C11	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C12	VCKYMN1HB331K	J	AA	330 pF,50V
C13	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C14	VCTYMN1CY103K	J	AA	0.01 µF,16V
C15	VCTYMN1CX472K	J	AA	0.0047 µF,16V
C16	VCKYMN1HB102K	J	AA	0.001 µF,50V
C17	VCEAEA1HW474M	J	AB	0.47 µF,50V,Electrolytic
C18	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C19	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C20	VCTYMN1CX332K	J	AA	0.0033 µF,16V
C21	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C22	VCTYMN1CY103N	J	AA	0.01 µF,16V
C24	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C25	VCTYMN1CY103N	J	AA	0.01 µF,16V
C30	VCCSMN1HL2R2C	J	AB	2.2 pF,50V
C31	VCTYMN1CX272K	J	AA	0.0027 µF,16V
C32	VCCSMN1HL270J	J	AA	27 pF,50V
C33	VCKYMN1HB102K	J	AA	0.001 µF,50V
C34	VCQYKA1HM333K	J	AB	0.033 µF,50V,Mylar
C35	VCEAEA1HW104M	J	AB	0.1 µF,50V,Electrolytic
C37	VCEAZA0JW227M	J	AC	220 µF,6.3V,Electrolytic
C38	VCTYMN1CY103K	J	AA	0.01 µF,16V
C39	VCEAEA1HW474M	J	AB	0.47 µF,50V,Electrolytic
C40	VCEAEA1HW334M	J	AB	0.33 µF,50V,Electrolytic
C41,42	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C43	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C44	VCEAZA1AW337M	J	AC	330 µF,10V,Electrolytic
C45	VCEAEA1HW475M	J	AB	4.7 µF,50V,Electrolytic
C50	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C51	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C52	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C53	VCKYMN1HB221K	J	AA	220 pF,50V
C54~57	VCKYMN1HB101K	J	AA	100 pF,50V
C58	VCKYPA1HB221K	J	AA	220 pF,50V
C59	VCQYKA1HM223K	J	AB	0.022 µF,50V,Mylar
C67,68	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C69,70	VCKYMN1HB221K	J	AA	220 pF,50V
C71	VCKYMN1HB331K	J	AA	330 pF,50V
C72,73	VCKYMN1HB101K	J	AA	100 pF,50V
C74	VCKYBT1HB101K	J	AA	100 pF,50V
C75	VCKYMN1HB101K	J	AA	100 pF,50V
C91	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C201,202	VCKYMN1HB102K	J	AA	0.001 µF,50V
C203,204	VCKYMN1HB181K	J	AA	180 pF,50V
C207,208	VCKYMN1HB102K	J	AA	0.001 µF,50V
C209	VCQYKA1HM223K	J	AB	0.022 µF,50V,Mylar
C210~213	VCKYMN1HB331K	J	AA	330 pF,50V
C214,215	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C216,217	VCQYKA1HM333K	J	AB	0.033 µF,50V,Mylar
C218,219	VCKYMN1HB561K	J	AA	560 pF,50V
C220,221	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C222	VCEAEA1CW226M	J	AB	22 µF,16V,Electrolytic
C223	VCTYMN1EF223Z	J	AA	0.022 µF,25V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C224	VCEAEA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C227,228	VCKYMN1HB102K	J	AA	0.001 µF,50V
C229,230	VCEAEA1CW226M	J	AB	22 µF,16V,Electrolytic
C231,232	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C235,236	VCTYMN1CX332K	J	AA	0.0033 µF,16V
C237,238	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C239	VCQYKA1HM823K	J	AC	0.082 µF,50V,Mylar
C240	VCEAEA1CW226M	J	AB	22 µF,16V,Electrolytic
C241	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C242	VCQYKA1HM392K	J	AA	0.0039 µF,50V,Mylar
C243	VCQYKA1HM273K	J	AB	0.027 µF,50V,Mylar
C244	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C246	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C265	VCEAEA1HW475M	J	AB	4.7 µF,50V,Electrolytic
C301	VCKYMN1HB820K	J	AA	82 pF,50V
C302	VCCSMN1HL6R8K	J	AA	6.8 pF,50V
C312	VCCSMN1HL100J	J	AA	10 pF,50V
C313	VCTYMN1CX472K	J	AA	0.0047 µF,16V
C314	VCCUMN1HJ4R7D	J	AA	4.7 pF (UJ),50V
C315	VCTYMN1CY103N	J	AA	0.01 µF,16V
C316	VCTYMN1CX472K	J	AA	0.0047 µF,16V
C317	VCCSMN1HL4R7C	J	AA	4.7 pF,50V
C318	VCKYMN1HB102K	J	AA	0.001 µF,50V
C319	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C320	VCKYMN1HB102K	J	AA	0.001 µF,50V
C321	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C322	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C323	VCCSMN1HL180J	J	AA	18 pF,50V
C324	VCCUMN1HJ3R3K	J	AB	3.3 pF (UJ),50V
C325	VCCCMN1HH220J	J	AA	22 pF (CH),50V
C326	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C327	VCKYMN1HB101K	J	AA	100 pF,50V
C328	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C331	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C332	VCKYMN1HB102K	J	AA	0.001 µF,50V
C333	VCCSPA1HL561J	J	AA	560 pF,50V
C336	VCCUMN1HJ220J	J	AA	22 pF (UJ),50V
C339	VCKZPA1HF473Z	J	AA	0.047 µF,50V
C342	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C344	VCCUMN1HJ180J	J	AA	18 pF (UJ),50V
C351,352	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C353	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C354	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C355	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C356	VCTYMN1CX222K	J	AA	0.0022 µF,16V
C357	VCTYMN0JY183M	J	AA	0.018 µF,6.3V
C358	VCKYMN1HB471K	J	AA	470 pF,50V
C359,360	VCEAEA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C362	VCEAEA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C363	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C364	CPU100V1500PJ	J	AC	0.0015 µF,100V,Polypropylene
C371,372	VCQYKA1HM183K	J	AB	0.018 µF,50V,Mylar
C373,374	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C383	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C384	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C385	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C387	VCKYMN1HB101K	J	AA	100 pF,50V
C388	VCKYMN1HB102K	J	AA	0.001 µF,50V
C390	VCCCMN1HH120J	J	AA	12 pF (CH),50V
C391	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C392	VCKYMN1HB102K	J	AA	0.001 µF,50V
C393	VCEAEA1CW226M	J	AB	22 µF,16V,Electrolytic
C431~436	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C439,440	VCEAEA1CW226M	J	AB	22 µF,16V,Electrolytic
C441,442	VCKYMN1HB181K	J	AA	180 pF,50V
C443,444	VCEAZA1HW684M	J	AB	0.68 µF,50V,Electrolytic
C445,446	VCQYKA1HM223K	J	AB	0.022 µF,50V,Mylar
C459,460	VCTYMN1CX272K	J	AA	0.0027 µF,16V
C461,462	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C463,464	VCKYMN1HB101K	J	AA	100 pF,50V
C465~468	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C471	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C475	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C476	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C481,482	VCEAEA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C601,602	VCKYPA1HB102K	J	AA	0.001 µF,50V
C603,604	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C606	VCEAZA1EW227M	J	AC	220 µF,25V,Electrolytic
C607,608	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C609,610	VCEAZA1CW477M	J	AC	470 µF,16V,Electrolytic
C611,612	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C613,614	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C701	VCKYMN1HB101K	J	AA	100 pF,50V
C702	VCTYMN1CY103N	J	AA	0.01 µF,16V
C703~705	VCKYMN1HB101K	J	AA	100 pF,50V
C706	VCEAEA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C707~710	VCTYMN1CY103N	J	AA	0.01 µF,16V
C712	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C713	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C714	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C716	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C717	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C901,902	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C903	VCEAZW1EW338M	J	AG	3300 µF,25V
C921,922	VCQYKA1HM223K	J	AB	0.022 µF,50V,Mylar
C923	VCEAZA1CW227M	J	AC	220 µF,16V,Electrolytic
C924	VCEAZA1EW477M	J	AD	470 µF,25V,Electrolytic
C925	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C926	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C927	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar

RESISTORS

	VRD-MN2BD000C	J	AA	0 ohm,Jumper,ø1.4×3.5mm,Ivory
R1	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R2	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R3	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R4	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R5	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R6	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R7	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R8	VRD-MN2BD123J	J	AA	12 kohms,1/8W
R9	VRD-MN2BD273J	J	AA	27 kohms,1/8W
R10	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R11	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R12	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R13	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R14	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R15	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R16	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R17	VRD-MN2BD823J	J	AA	82 kohms,1/8W
R18	VRD-ST2CD335J	J	AA	3.3 Mohms,1/6W
R19	VRD-MN2BD393J	J	AA	39 kohms,1/8W
R20	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R21	VRD-MN2BD563J	J	AA	56 kohms,1/8W
R22	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R23	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R24	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R25	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R26,27	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R28,29	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R30	VRD-MN2BD183J	J	AA	18 kohms,1/8W
R31	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R32	VRD-MN2BD563J	J	AA	56 kohms,1/8W
R33	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R34	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R35	VRD-MN2BD471J	J	AA	470 ohms,1/8W
R36,37	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R38	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R39,40	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R41	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R42	VRD-MN2BD561J	J	AA	560 ohms,1/8W
R43	VRD-MN2BD120J	J	AA	12 ohms,1/8W
R45	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R46,47	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R54	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R56	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R57	VRD-MN2BD273J	J	AA	27 kohms,1/8W
R58	VRD-MN2BD681J	J	AA	680 ohms,1/8W
R60	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R73	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R74	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R75,76	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R77,78	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R82	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R86~88	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R89,90	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R91,92	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R93	VRD-ST2EE4R7J	J	AA	4.7 ohms,1/4W
R94	VRD-ST2EE560J	J	AA	56 ohms,1/4W
R95	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R96	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R97	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R98	VRD-ST2CD103J	J	AA	10 kohm,1/6W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R201	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R202	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R203,204	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R205	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R206,207	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R208~213	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R214	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R215	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R216,217	VRD-ST2CD560J	J	AA	56 ohms,1/6W
R218,219	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R220	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R223,224	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R225,226	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R227	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R228	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R229	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R230	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R231,232	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R233	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R234	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R235	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R236,237	VRD-MN2BD561J	J	AA	560 ohms,1/8W
R238	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R239,240	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R243~249	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R250	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R251	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R252	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R253	VRD-MN2BD120J	J	AA	12 ohms,1/8W
R254	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R255	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R256	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R257	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R258	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R259	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R260	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R265	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R266	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R311	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R312	VRD-ST2CD220J	J	AA	22 ohms,1/6W
R313	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R314	VRD-MN2BD100J	J	AA	10 ohm,1/8W
R315	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R316	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R317	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R318	VRD-MN2BD681J	J	AA	680 ohms,1/8W
R319	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R320	VRD-ST2CD821J	J	AA	820 ohms,1/6W
R331	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R339	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R351	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R352	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R353	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R354	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R357	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R358	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R359	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R360	VRD-ST2EE471J	J	AA	470 ohms,1/4W
R363	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R373,374	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R375,376	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R386	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R387	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R388	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R390	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R391	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R392	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R393~396	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R397	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R399	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R447,448	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R449,450	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R451,452	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R460~462	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R463	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R601,602	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R603,604	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R605,606	VRD-ST2CD121J	J	AA	120 ohms,1/6W
R607,608	VRD-ST2CD3R3J	J	AA	3.3 ohms,1/6W
R609,610	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R611,612	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R613	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R701,702	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R703	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R704	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R705	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R706	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R707,708	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R711,712	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R714~716	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R717	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R718	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R719,720	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R721	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R722	VRD-MN2BD820J	J	AA	82 ohms,1/8W
R723	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R724	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R725~729	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R730,731	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R732	VRD-ST2EE120J	J	AA	12 ohms,1/4W
R734,735	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R736	VRD-MN2BD151J	J	AA	150 ohms,1/8W
R737	VRD-MN2BD471J	J	AA	470 ohms,1/8W
R738~741	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R742	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R743	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R744,745	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R749	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R757~760	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R761	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R762	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R764	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R765	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R921	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R922	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R923	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R924	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R925	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R926	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R927	VRD-RT2HD271J	J	AA	270 ohms,1/2W

OTHER CIRCUITRY PARTS

BIM5/CNS4/CNS5	QCNWN0894AWZZ	J	AH	Connector Ass'y,6/10/2Pin
CNP1	92LCONE5P53253	J	AB	Plug,5Pin
CNP2	92LCONE8P53253	J	AC	Plug,8Pin
CNP3	92LCONE6P53253	J	AC	Plug,6Pin
CNP3A	92LCONE6P53254	J	AC	Plug,6Pin
CNP4	92LCONEAP53253	J	AC	Plug,10Pin
CNP201	92LCONE3P53253	J	AB	Plug,3Pin
CNP202	92LCONE7P53253	J	AC	Plug,7Pin
CNP203	92LCONE8P53253	J	AC	Plug,8Pin
CNP204	QCNCM035BAWZZ	J	AB	Plug,2Pin
CNP301	92LCONE-3P5268	J	AC	Plug,3Pin
CNP302	QCNWN1455AWZZ	J	AE	Plug,2Pin
CNP901	QCNCM035BAWZZ	J	AB	Plug,2Pin
CNP902	QCNCM036BAWZZ	J	AC	Plug,2Pin
CNS1A/B	QCNWN0891AWZZ	J	AG	Connector Ass'y,5/5Pin
CNS2A/B	QCNWN0892AWZZ	J	AF	Connector Ass'y,8/8Pin
CNS3A/B	QCNWN0893AWZZ	J	AF	Connector Ass'y,6/6Pin
CNS201	QCNWN0634AWZZ	J	AK	Connector Ass'y,3Pin
CNS202	QCNWN0635AWZZ	J	AQ	Connector Ass'y,7Pin
CNS203	QCNWN0921AWZZ	J	AE	Connector Ass'y,8Pin
CNS204	QCNWN0923AWZZ	J	AD	Connector Ass'y,2Pin
JK601	QJAKM0012AWZZ	J	AF	Jack,Headphones
LCD701	RV-LX0024AWZZ	J	AL	LCD Display
M1	92LMTR1858CASY	J	AS	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
M3	92LMTR2037AS1	J	AP	Motor with Worm [Turntable Up/Down/Loading]
M601(257-7)	RMOTM0004AWM1	J	AR	Motor with Pulley [Tape]
RX701	VHL21043TH2-1	J	AG	Remote Sensor,21043TH2
SO601	QTANA0801AWZZ	J	AK	Terminal,Speaker
⚠ SO901	QSOCA0209AWZZ	J	AH	Socket,AC Input
SOLM2(247)	RPLU-0002AWZZ	J	AH	Solenoid Ass'y
SW1	QSW-P0004AWZZ	J	AE	Switch,Push Type [Open/Close]
SW2	QSW-F0001AWZZ	J	AD	Switch,Leaf/Skeleton Type [Mecha Up]
SW3	QSW-P0005AWZZ	J	AD	Switch,Push Type [Disc Number]
SW4	QSW-F9001AW01	J	AD	Switch,Push Type [Pickup In]
SW605(257-8)	92LM-SW1491A	J	AE	Switch,Leaf Type [Tape 1 Main]
SW606(257-9)	92LM-SW1491A	J	AE	Switch,Leaf Type [Tape 2 Main]
SW607(257-10)	92LM-SW1658A	J	AB	Switch,Leaf Type [Tape 1 Record]

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
SW608(257-11)	92LM-SW1658A	J	AB	Switch,Leaf Type [Tape 1 Play]
SW701	92LSWICHT1663T	J	AC	Switch,Key Type [Power]
SW702	92LSWICHT1663T	J	AC	Switch,Key Type [Volume Up]
SW703	92LSWICHT1663T	J	AC	Switch,Key Type [Volume Down]
SW704	92LSWICHT1663T	J	AC	Switch,Key Type [Play]
SW705	92LSWICHT1663T	J	AC	Switch,Key Type [Fast Forward]
SW706	92LSWICHT1663T	J	AC	Switch,Key Type [Rewind]
SW707	92LSWICHT1663T	J	AC	Switch,Key Type [Open/Close]
SW708	92LSWICHT1663T	J	AC	Switch,Key Type [Stop]
SW709	92LSWICHT1663T	J	AC	Switch,Key Type [Disc Skip]
SW710	92LSWICHT1663T	J	AC	Switch,Key Type [X-BASS]
SW711	92LSWICHT1663T	J	AC	Switch,Key Type [Function]
SW712	92LSWICHT1663T	J	AC	Switch,Key Type [Band]
SW714	92LSWICHT1663T	J	AC	Switch,Key Type [Memory]
SW715	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Up]
SW716	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Down]

CD MECHANISM PARTS

301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0080AWZZ	J	AC	Rail,Guide
304	NSFTM0002AWFW	J	AE	Shaft,Guide
305	92LMCUSN1524A	J	AD	Cushion
⚠306	92LHPC1MASY	J	BG	Pickup Unit Ass'y
306- 1	————		—	Pickup Unit (Not Replacement Item)
306- 2	NGERH0010AWZZ	J	AB	Gear,Rack
306- 3	MSPRC0961AFZZ	J	AA	Spring,Rack
701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
702	XHBSD20P05000	J	AA	Screw,ø2×5mm
703	XBBSD20P03000	J	AA	Screw,ø2×3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×ø3.8×0.25mm
M1	92LMTR1854CASY	J	AS	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
SW4	QSW-F9001AW01	J	AD	Switch,Push Type [Pickup In]

CABINET PARTS

201	92LCAB3037AS1	J	AX	Front Panel Ass'y
201- 1	————		—	Front Panel (Not Replacement Item)
201- 2	HDECQ0446AWSA	J	AG	Panel,LCD Display
201- 3	GCOVA1204AWSA	J	AD	Cover,Remote Sensor
202	GITAR0427AWSA	J	AG	Back Board [For U.S.A.]
202	GITAR0428AWSA	J		Back Board [For Central America]
202	GITAR0430AWSA	J		Back Board [For Canada]
203	GITAS0035AWSC	J	AK	Side Panel,Left
204	GITAS0036AWSC	J	AH	Side Panel,Right
205	GCAB-1046AWSC	J	AP	Top Cabinet
206	GCOVA1231AWSA	J	AM	Cover,CD Tray
207	92LLABL1784F	J	AC	Label,UL Caution
208	92LCSPR1596A	J	AA	Spring,Cassette Holder Up
209	JBTN-0126AWSA	J	AE	Button,Record [Tape 1]
210	JBTN-0127AWSA	J	AE	Button,Play [Tape 1]
211	JBTN-0128AWSA	J	AE	Button,Rewind [Tape 1]
212	JBTN-0129AWSA	J	AE	Button,Fast Forward [Tape 1]
213	JBTN-0130AWSA	J	AE	Button,Stop/Eject [Tape 1]
214	JBTN-0131AWSA	J	AE	Button,Play [Tape 2]
215	LCHSM0054AWSA	J	AH	Main Chassis
217	JBTN-0132AWSA	J	AE	Button,Stop/Eject [Tape 2]
218	PRDAR0131AWFW	J	AG	Heat Sink
220	MSPRD0044AWFJ	J	AB	Spring,Lock Lever
221	MLEVP0067AWZZ	J	AC	Lever,Lock
222	NROLP0009AWZZ	J	AB	Roller
223	LCHSZ0010AWZZ	J	AM	Chassis,Loading
224	MLEVP0070AWZZ	J	AB	Lever,Turntable Lock
225	MSPRC0020AWFJ	J	AB	Spring,Turntable Lock Lever
226	GCAB-1044AWSA	J	AM	CD Player Base
228	LHLDZ1139AWSA	J	AD	Support,Stabilizer
229	92LHOLD2037AS1	J	AK	Stabilizer Ass'y
229- 1	————		—	Stabilizer (Not Replacement Item)
229- 2	PMAGF0001AWZZ	J	AF	Magnet
229- 3	92LSUPT1749D	J	AA	Support,Magnet
230	NTNT-0018AWSA	J	AK	Turntable
231	LHLDZ1140AWZZ	J	AB	Guide
232	MLEVP0068AWZZ	J	AB	Lever,Change
233	MSPRC0024AWFW	J	AB	Spring,Solenoid
234	LCHSZ0011AWZZ	J	AG	Chassis,CD Mechanism
235	NGERK0004AWZZ	J	AB	Gear,Bevel
237	NGERW0006AWZZ	J	AC	Gear,Worm Wheel
238	NPLYD0001AWZZ	J	AB	Pulley
239	NGERK0005AWZZ	J	AB	Gear,Loading
240	MLEVP0066AWZZ	J	AE	Lever,Shift
241	NGERH0064AWZZ	J	AD	Gear,Cam
242	NGERK0003AWZZ	J	AC	Gear,Drive
243	LHLDZ1141AWZZ	J	AB	Support,Pitch
244	NGERH0065AWZZ	J	AB	Gear,Turntable
245	NBLTK0029AWZZ	J	AB	Belt,Drive
246	92LN-BAND1318A	J	AA	Nylon Band,80mm
247(SOLM2)	RPLU-0002AWZZ	J	AH	Solenoid Ass'y
248	92LCOV3037CTS1	J	AK	Cassette Cover Ass'y,Tape 1
248- 1	————		—	Cassette Cover,Tape 1 (Not Replacement Item)
248- 2	HDECQ0447AWSA	J	AD	Panel,Cassette Cover,Tape 1
249	92LCOV3037CTS2	J	AK	Cassette Cover Ass'y,Tape 2
249- 1	————		—	Cassette Cover,Tape 2 (Not Replacement Item)
249- 2	HDECQ0448AWSA	J	AD	Panel,Cassette Cover,Tape 2
250	MLIFP0001AWSA	J	AG	Damper
251	JKNBZ0591AWSA	J	AG	Button,Stop
252	JKNBZ0590AWSA	J	AG	Button,Function
253	JKNBZ0587AWSA	J	AG	Button,Volume Up/Down
254	JKNBZ0588AWSA	J	AF	Button,X-BASS
255	JKNBZ0589AWSA	J	AG	Button,Power/Function/Tuning Up/Down
257	92LMECHA3037A	J	BH	Tape Mechanism Ass'y
257- 1	92LM-BELT1651B	J	AB	FF/REW Belt
257- 2	92LMBELT1658A1	J	AC	Belt,Drive [Tape 1]
257- 3	92LMBELT1658B1	J	AC	Drive Belt [Tape 2]
257- 4	92LM-EH1658A	J	AG	Head,Erase
257- 5	92LM-PRA1651A	J	AE	Pinch Roller Ass'y
257- 6	92LM-RPH1746A	J	AM	Head,Record/Playback
257- 7(M601)	RMOTM0004AWM1	J	AR	Motor with Pulley [Tape]
257- 8(SW605)	92LM-SW1491A	J	AE	Switch,Leaf Type [Tape 1 Main]
257- 9(SW606)	92LM-SW1491A	J	AE	Switch,Leaf Type [Tape 2 Main]
257-10(SW607)	92LM-SW1658A	J	AB	Switch,Leaf Type [Tape 1 Record]
257-11(SW608)	92LM-SW1658A	J	AB	Switch,Leaf Type [Tape 1 Play]
259	TLABS0058AWZZ	J	AB	Label,UL Shinca Jitra
260	TLABS0155AWZZ	J	AC	Label,UL Team Concepts
⚠261	QLUGP0001AWZZ	J	AC	Terminal,Lug
262	GDORF0060AWSA	J	AF	Cassette Holder,Tape 1
263	GDORF0061AWSA	J	AF	Cassette Holder,Tape 2
264	XWHJZ62-09510	J	AB	Washer,ø6.2×ø10×0.9mm
265	LANGF0032AWZZ	J	AC	Support,Turntable Lock Lever
266	PCUSG0022AWZZ	J	AB	Cushion,Foot
267	TLABN0086AWZZ	J	AB	Label,Production SER.No. [U.S.A. Only]
268	92LLABL372C	J	AB	Label,Serial No. [For Canada/Central America Only]
269	PCOVZ1013AWZZ	J	AB	Cover,Wire
601	XEBSD30P10000	J	AA	Screw,ø3×10mm
602	XESSD30P10000	J	AA	Screw,ø3×10mm
603	XEBSD30P12000	J	AA	Screw,ø3×12mm
605	XEBSF30P12000	J	AA	Screw,ø3×12mm
606	LX-JZ0004AWFD	J	AA	Screw,ø3×12mm
607	LX-JZ0002AWFD	J	AA	Screw,ø3×10mm
608	LX-EZ0005AWFD	J	AA	Screw,ø2.6×10mm
609	XJSSF30P10000	J	AA	Screw,ø3×10mm
610	XBPSD26P05JSO	J	AB	Screw,ø2.6×5mm
611	LX-TZ0019AFZZ	J	AB	Screw,Special
612	XEBSD26P12000	J	AA	Screw,ø2.6×12mm
613	XJBSF30P08000	J	AA	Screw,ø3×8mm
614	XJBSD30P08000	J	AA	Screw,ø3×8mm
615	XWHSD32-10130	J	AA	Washer,Power Transformer

PACKING PARTS (For Canada/Central America)

	SPAKA0196AWZZ	J	AN	Packing Add.,Left/Right
	SPAKC0733AWZZ	J	AS	Packing Case [For Central America]
	SPAKC0750AWZZ	J		Packing Case [For Canada]
	SPAKP0013AWZZ1	J	AC	Polyethylene Bag,Unit
	SPAKZ0292AWZZ	J	AB	Mirror Mat
	TLABR1029AWZZ	J	AB	Label,Bar Code [For Central America Only]
	92LBAG1460C1	J	AB	Polyethylene Bag,Accessories

CD-C602,CPC602

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

ACCESSORIES

⚠	QACCD0015AW00	J	AM	AC Power Supply Cord [For Canada]
⚠	QACCD0020AWZZ	J	AN	AC Power Supply Cord [For U.S.A./Central America]
	QANTL0007AWZZ	J	AK	AM/FM Loop Antenna
	TINSE0235AWZZ	J	AD	Operation Manual [For U.S.A.]
	TINSK0078AWZZ	J		Operation Manual [For Canada]
	TINSZ0394AWZZ	J	AB	Quick Guide [For U.S.A./Central America Only]
	TINSZ0395AWZZ	J		Operation Manual [For Central America]
	TLABZ0529AWZZ	J	AB	Label,Feature,Unit,Tape 1
	TLABZ0530AWZZ	J	AB	Label,Feature,Unit,Tape 2
	RRMCG0103AWSA	J	AR	Remote Control
	92LLID1782A	J	AQ	Battery Lid,Remote Control

P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A1~4	92LPWB3037MANS	J	—	Main/Display/Spacer A/B (Combined Ass'y)
PWB-B	QPWBF0027AWZZ	J	AD	CD Motor (PWB Only)
PWB-C	QPWBF0341AWZZ	J	AB	Tray Motor (PWB Only)

OTHER SERVICE PARTS

	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner

CP-C602

SPEAKER BOX PARTS (Front Speaker)

701	92L121-0160	J	AT	Net Frame Ass'y
702	92L051-0068	J	AV	Speaker Box Ass'y
703	92L291-0080	J	AH	Cord,Speaker
704	92L372-0006	J	AD	Screw,ø4×12mm
705	92L351-0321	J	AC	Label,Specifications
706	92L316-0067	J	AP	Panel,Duct
707	92L394-0026	J	AB	Port Cushion
SP1,2	VSP0010PBR36A	J	AR	Speaker,Woofer

SPEAKER BOX PARTS (Rear Speaker) (GBOXS0020AWM1)

901	92LSRCNF001RS	J	AP	Net Frame Ass'y
902	92LSRCBC002RS	J	AM	Bottom Cabinet
903	92LSRCSC004RS	J	AK	Cord,Speaker
904	92LSRCSW005RS	J	AB	Screw,ø3×12mm
905	92LSRCPL009RS	J		Label,Specifications
SP3,4	VSP0080PBP1CA	J	AN	Speaker,Woofer

PACKING PARTS

	92LSRCBP008RS	J		Packing Add.,Bottom,Rear Speaker
	92LSRCPE006RS	J		Polyethylene Bag,Rear Speaker
	92LSRCTP007RS	J		Packing Add.,Top,Rear Speaker
	92L411-0019	J	AB	Polyethylene Bag,Front Speaker
	92L412-0121	J		Packing Add.,Top/Bottom,Front Speaker

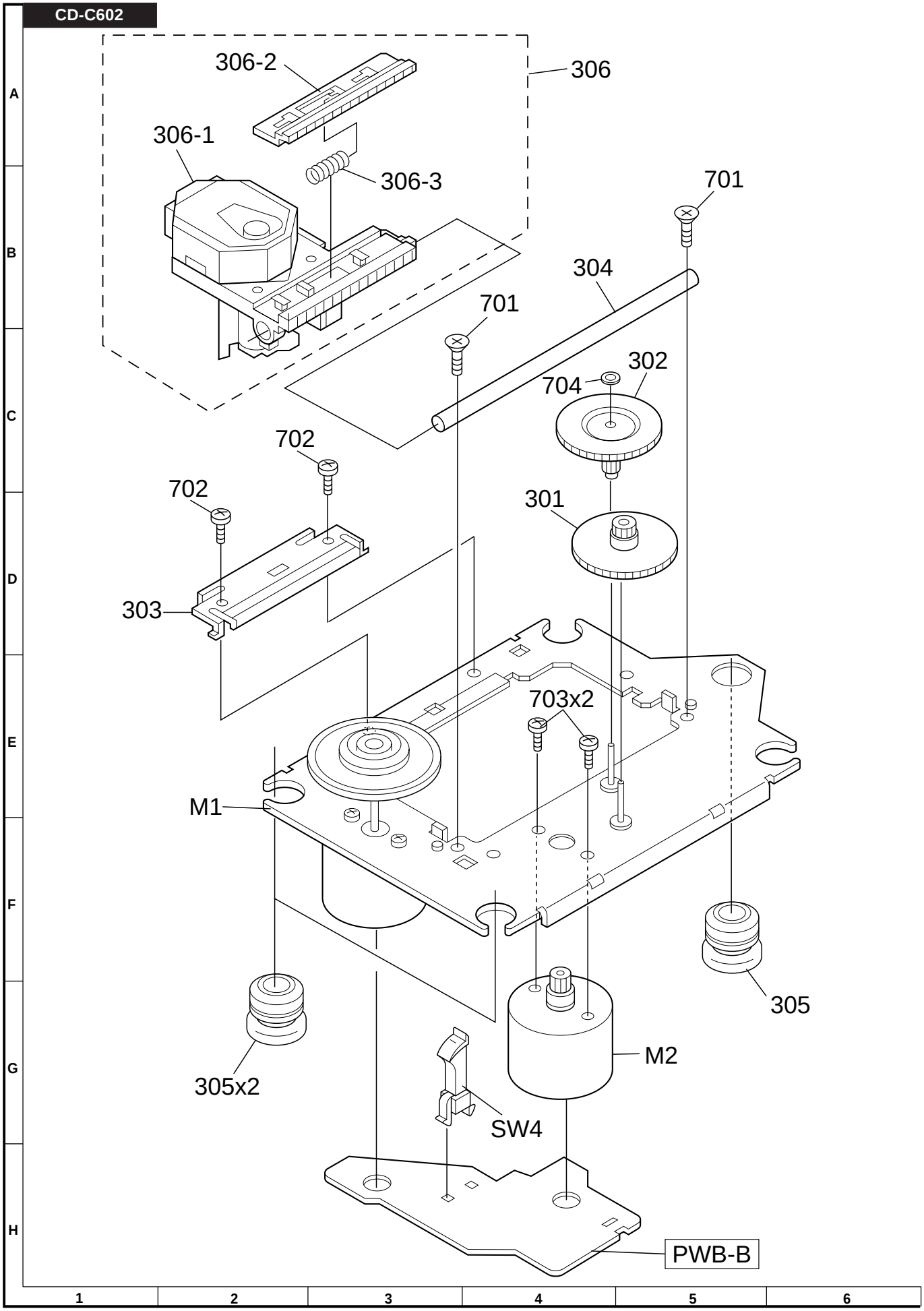
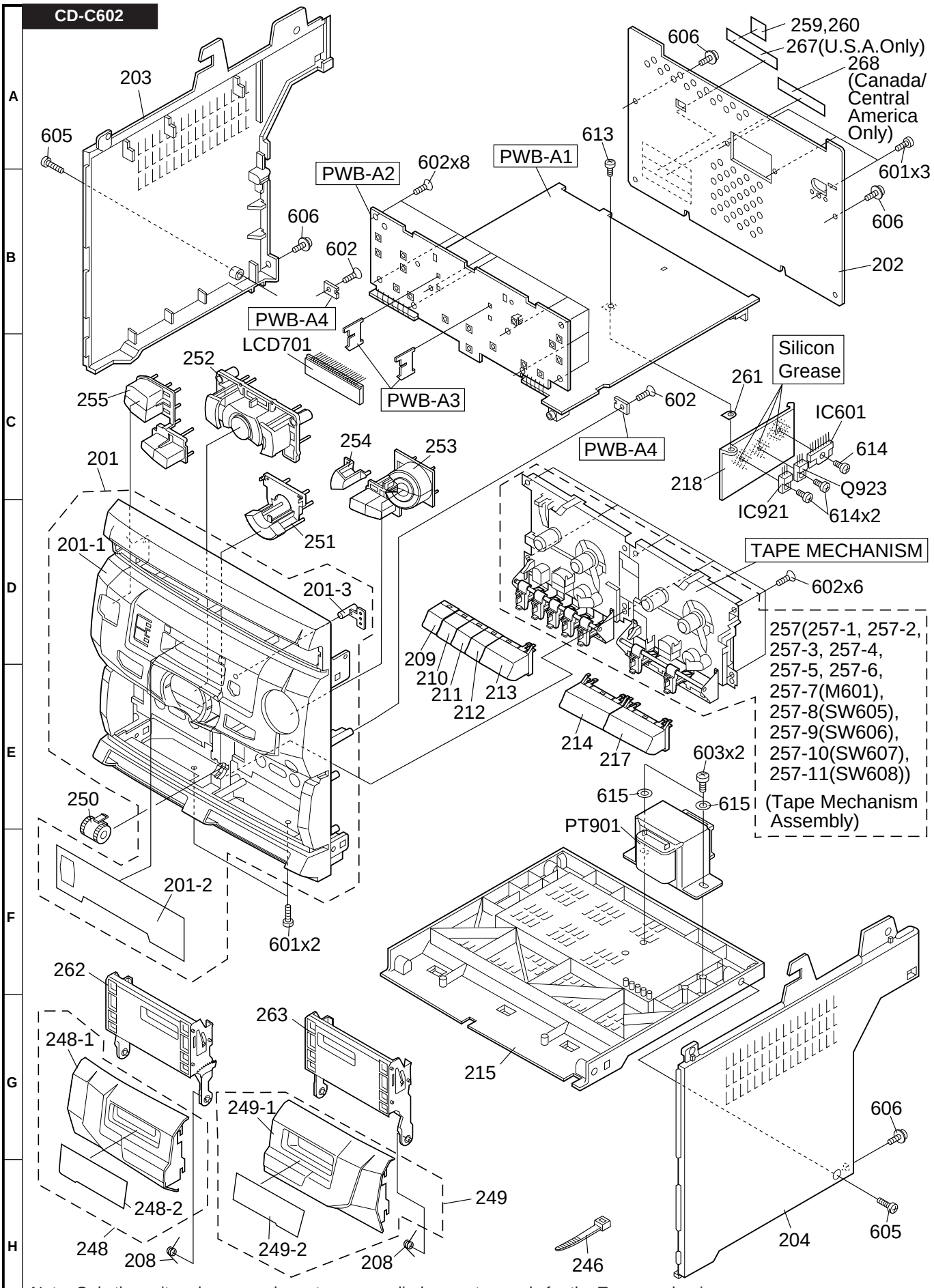


Figure 6 CD MECHANISM EXPLODED VIEW



Note: Only the unit and consumale parts are supplied as aprts supply for the Tape mechanism.

Figure 7 CABINET EXPLODED VIEW (1/2)

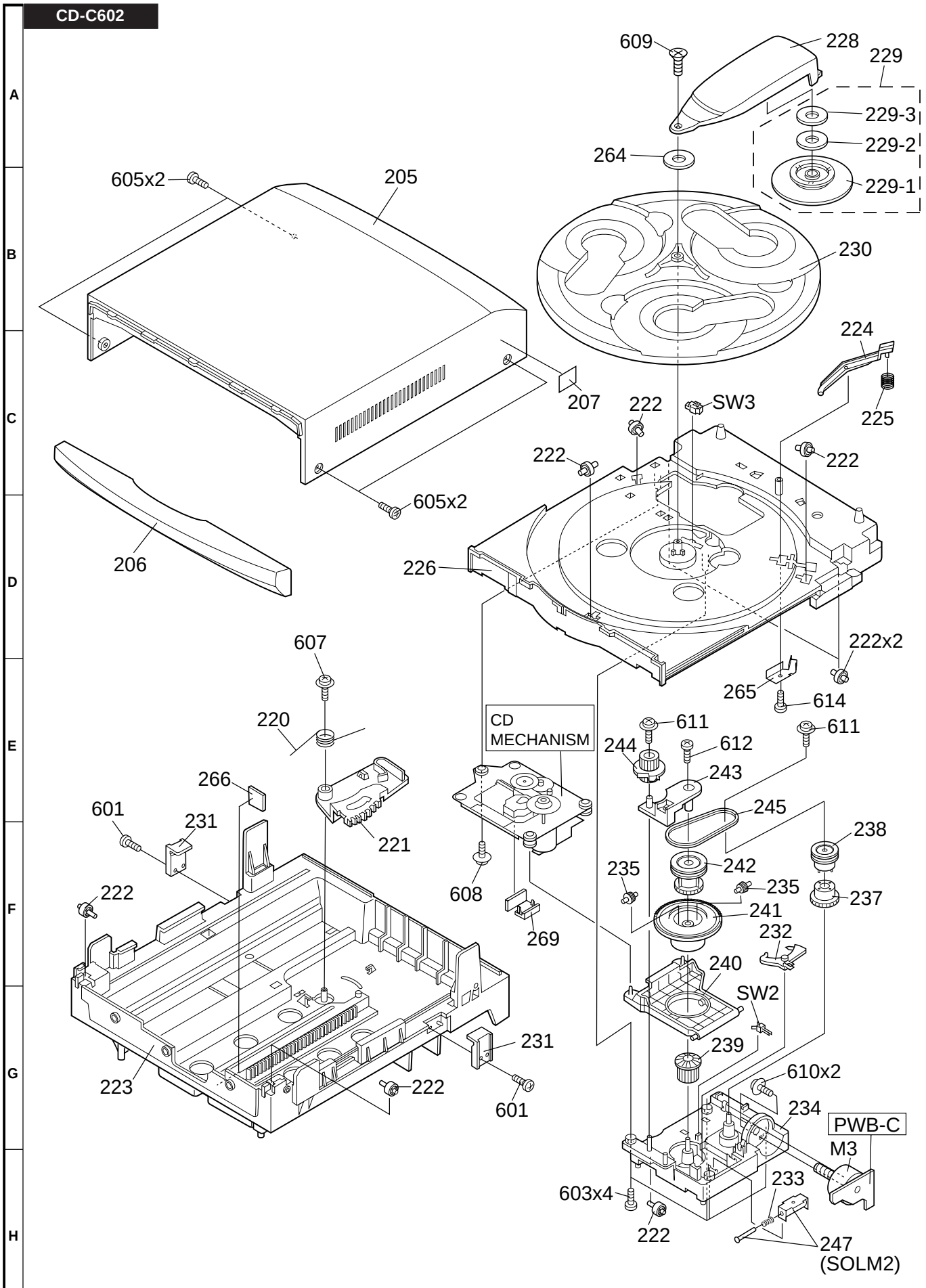


Figure 8 CABINET EXPLODED VIEW (2/2)

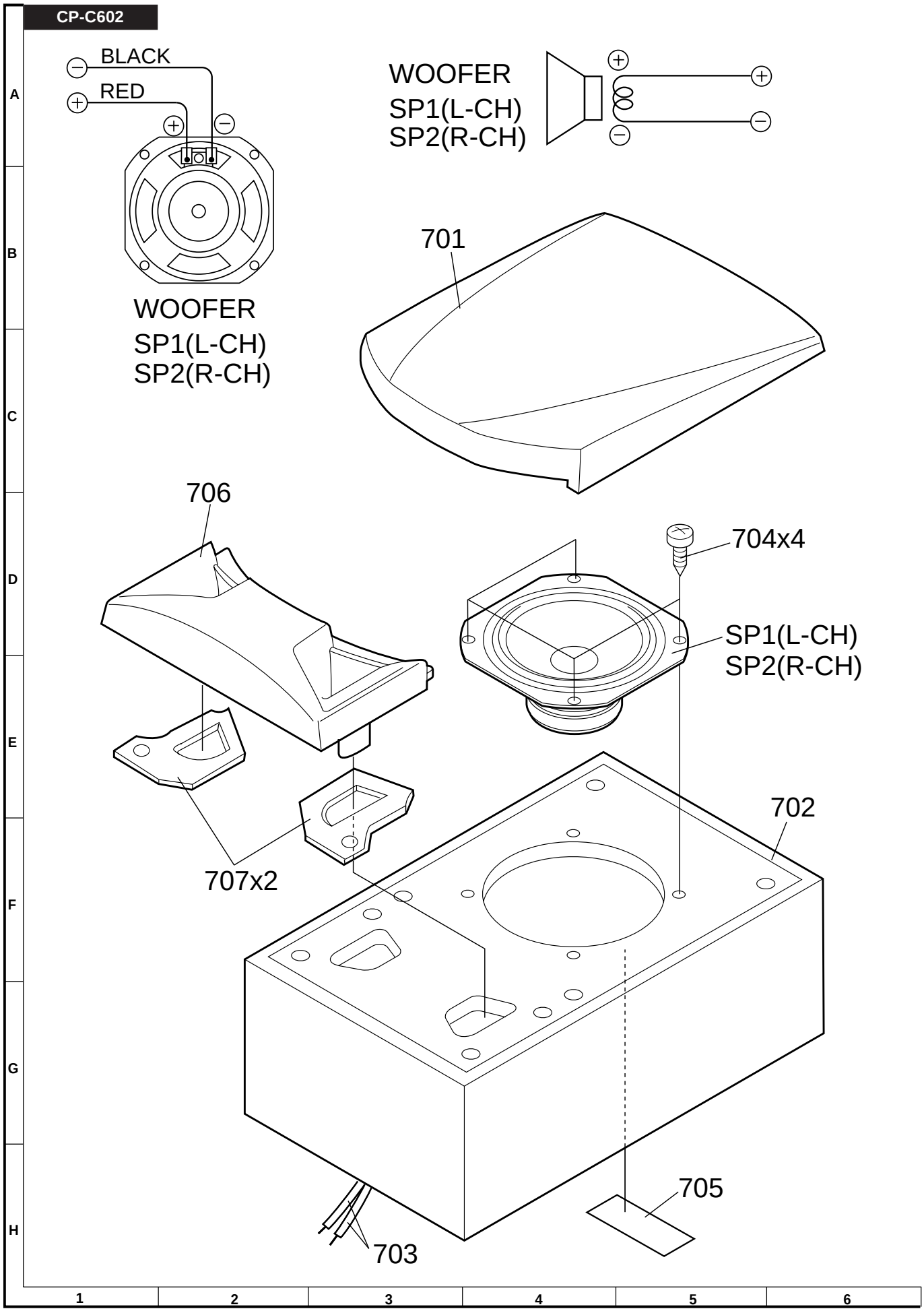


Figure 9 FRONT SPEAKER EXPLODED VIEW (1/2)

GBOXS0020AWM1

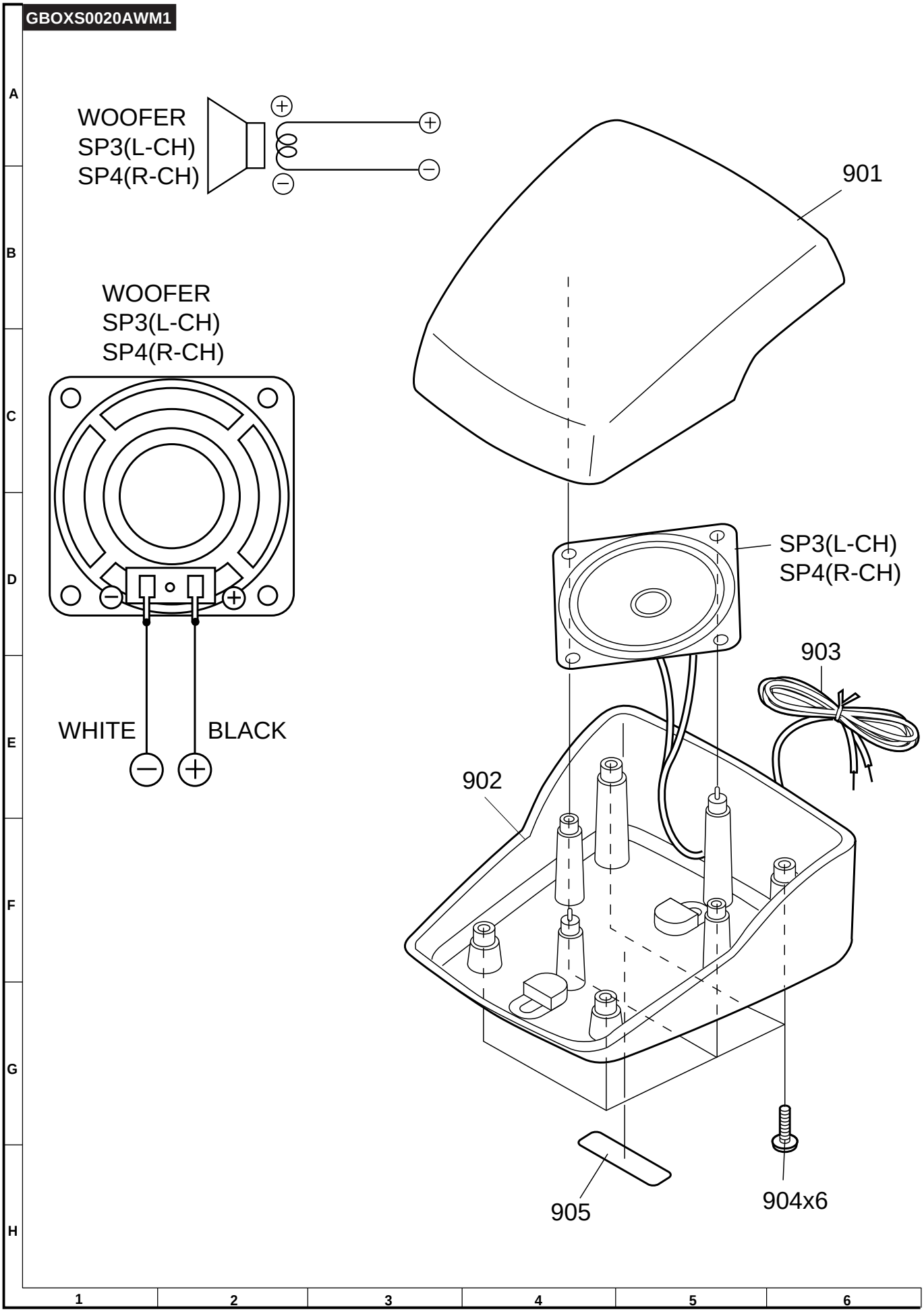
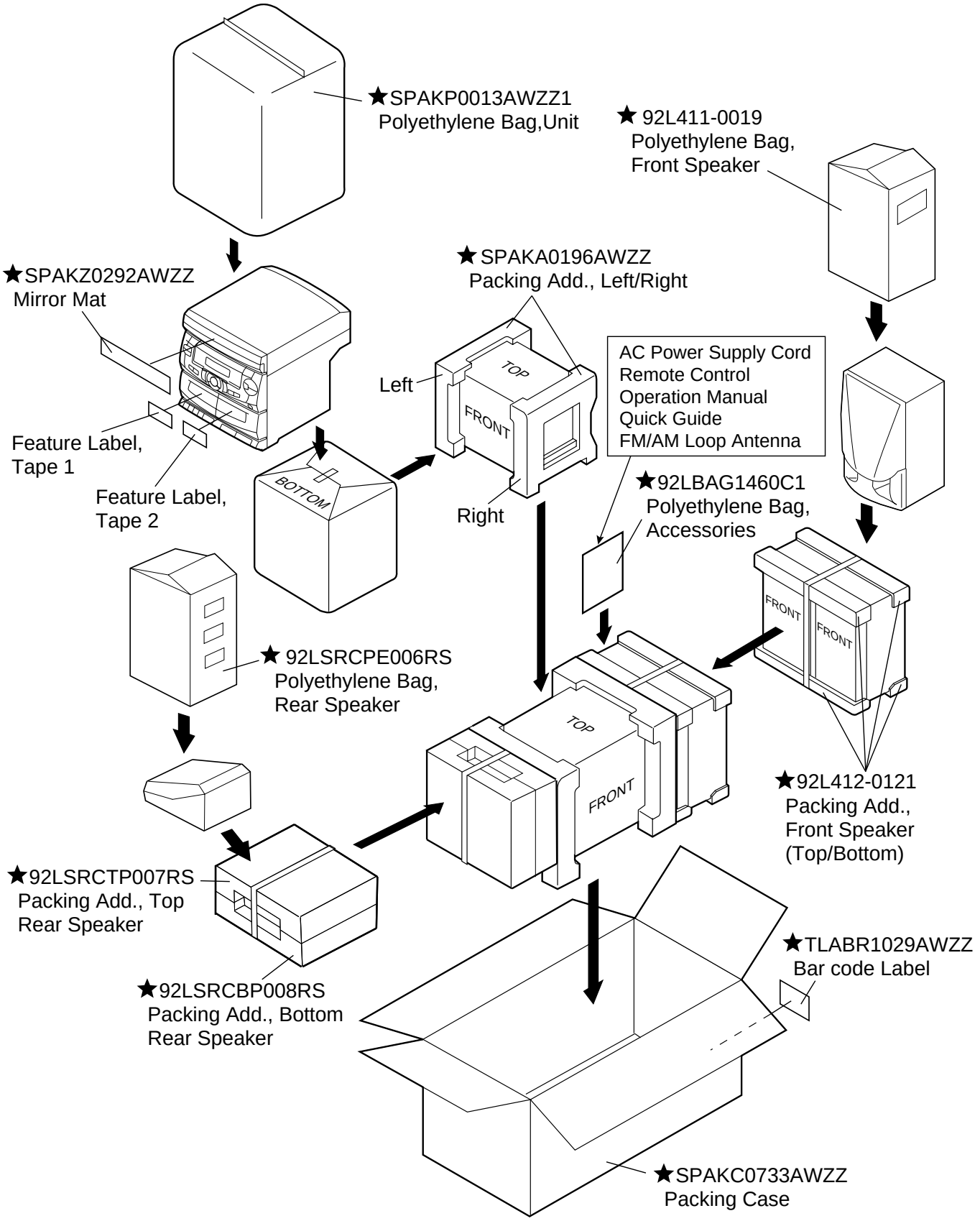


Figure 10 REAR SPEAKER EXPLODED VIEW (2/2)

PACKING OFF THE SET (FOR U.S.A. ONLY)

Setting position of switches and knobs	
Tape Mechanism	STOP



★ Not Replacement Item

— M E M O —

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